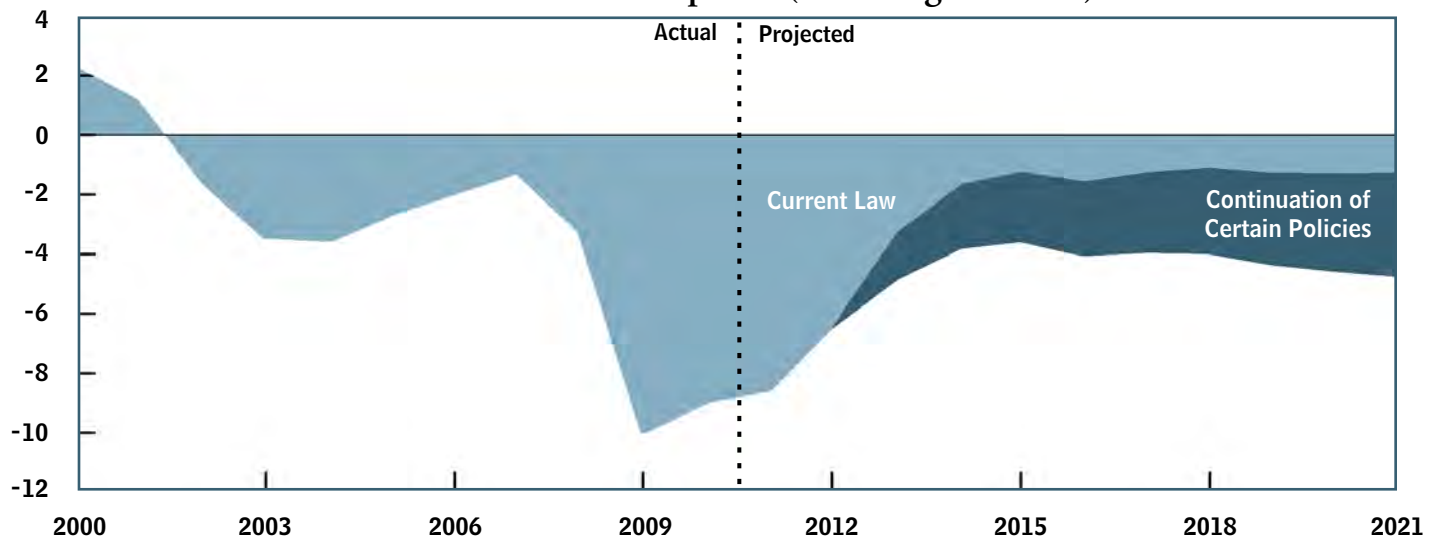


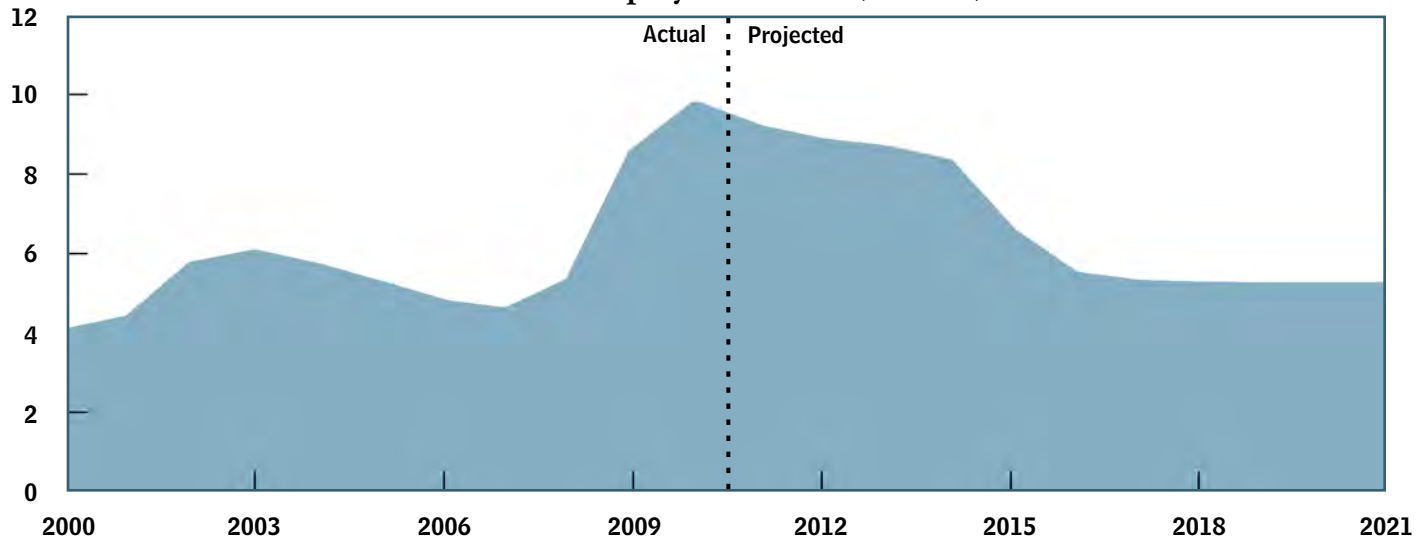
CBO

The Budget and Economic Outlook: An Update

Total Deficits or Surpluses (Percentage of GDP)



The Unemployment Rate (Percent)



AUGUST 2011

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The Budget and Economic Outlook: An Update

August 2011

Notes

Unless otherwise indicated, all years referred to in describing the economic outlook are calendar years; other years are federal fiscal years (which run from October 1 to September 30).

Numbers in the text and tables may not add up to totals because of rounding.

Some of the figures in Chapter 2 use shaded vertical bars to indicate periods of recession. (A recession extends from the peak of a business cycle to its trough.)

CBO initially completed its economic forecast in early July, but it updated the forecast in early August to reflect the policy changes enacted in the Budget Control Act of 2011. However, the forecast described in this report does not reflect any other developments since early July, including the recent swings in financial markets and the annual revision to the national income and product accounts (compiled by the Bureau of Economic Analysis). Incorporating that recent news and economic data would have led CBO to temper its near-term forecast for economic growth.

Supplemental data for this analysis are available on CBO's Web site (www.cbo.gov).



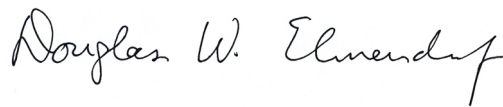
Preface

This volume is one of a series of reports on the state of the budget and the economy that the Congressional Budget Office (CBO) issues each year. It satisfies the requirement of section 202(e) of the Congressional Budget Act of 1974 for CBO to submit to the Committees on the Budget periodic reports about fiscal policy and to provide baseline projections of the federal budget. In keeping with CBO's mandate to provide objective, impartial analysis, this report makes no recommendations.

The baseline spending projections were prepared by CBO's Budget Analysis Division. The revenue estimates were prepared by the agency's Tax Analysis Division, with assistance from the staff of the Joint Committee on Taxation. The economic projections were prepared by CBO's Macroeconomic Analysis Division. The many people at CBO who worked on this report are listed in Appendix C.

CBO's Panel of Economic Advisers commented on an early version of the economic forecast underlying this report. Members of the panel are Raj Chetty, Menzie D. Chinn, Dan L. Crippen, Stephen J. Davis, Robert E. Hall, Jan Hatzius, Douglas Holtz-Eakin, Simon Johnson, Anil Kashyap, Lawrence Katz, Donald Kohn, N. Gregory Mankiw, Rudolph G. Penner, Adam S. Posen, James Poterba, Joel Prakken, Carmen M. Reinhart, Alice Rivlin, and Stephen P. Zeldes. Wesley Phoa and John Fernald attended the panel's meeting as guests. Although CBO's outside advisers provided considerable assistance, they are not responsible for the contents of this report.

The report, along with supplemental information, is available on the agency's Web site (www.cbo.gov).



Douglas W. Elmendorf
Director

August 2011



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Summary

The United States is facing profound budgetary and economic challenges. At 8.5 percent of gross domestic product (GDP), the \$1.3 trillion budget deficit that the Congressional Budget Office (CBO) projects for 2011 will be the third-largest shortfall in the past 65 years (exceeded only by the deficits of the preceding two years). This year's deficit stems in part from the long shadow cast on the U.S. economy by the financial crisis and the recent recession. Although economic output began to expand again two years ago, the pace of the recovery has been slow, and the economy remains in a severe slump. Recent turmoil in financial markets in the United States and overseas threatens to prolong the slump.

CBO expects that the recovery will continue but that real (inflation-adjusted) GDP will stay well below the economy's potential—a level that corresponds to a high rate of use of labor and capital—for several years. On the basis of economic data available through early July, when the agency initially completed its economic forecast, CBO projects that real GDP will increase by 2.3 percent this year and by 2.7 percent next year. Under current law, federal tax and spending policies will impose substantial restraint on the economy in 2013, so CBO projects that economic growth will slow that year before picking up again, averaging 3.6 percent per year from 2013 through 2016.

With modest economic growth anticipated for the next few years, CBO expects employment to expand slowly. The unemployment rate is projected to fall from 9.1 percent in the second quarter of 2011 to 8.9 percent in the fourth quarter of the year and to 8.5 percent in the fourth quarter of 2012—and then to remain above 8 percent until 2014. Although inflation increased in the first half of 2011, spurred largely by a sharp rise in oil prices, CBO projects that it will diminish in the second half of the year and then stay below 2.0 percent over the next several years.

If the recovery continues as CBO expects, and if tax and spending policies unfold as specified in current law, deficits will drop markedly as a share of GDP over the next few years. Under CBO's baseline projections, which generally reflect the assumption that current law will not change, deficits fall to 6.2 percent of GDP next year and 3.2 percent in 2013, and they average 1.2 percent of GDP from 2014 to 2021 (see Summary Table 1). Those projections incorporate the effects of the deficit reduction measures in the recently enacted Budget Control Act of 2011; they also reflect the sharp increases in revenues that will occur when provisions of the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (the 2010 tax act) expire.

In CBO's baseline, cumulative deficits total \$3.5 trillion between 2012 and 2021, and by the end of 2021, debt held by the public equals 61 percent of GDP. That estimate of deficits over the next 10 years is considerably lower than the \$6.7 trillion that the agency projected in March. About two-thirds of that reduction stems from the effects of enacting the Budget Control Act, which set caps on future discretionary spending and created a process for adopting additional deficit reduction measures; the remainder is the result of changes in the economic outlook and technical revisions to CBO's projections.

CBO's baseline projections incorporate the assumption that current law remains in place so they can serve as a benchmark for policymakers to use in considering possible changes to law. But those baseline projections understate the budgetary challenges facing the federal government in the coming years because changes in policy that are scheduled to take effect under current law will produce a federal tax system and spending for some federal programs and activities that differ noticeably from what people have been accustomed to.

In particular, the baseline projections in this report include the following policies specified in current law:

- Certain provisions of the 2010 tax act, including extensions of lower rates and expanded credits and deductions originally enacted in the Economic Growth and Tax Relief Reconciliation Act of 2001, the Jobs and Growth Tax Relief Reconciliation Act of 2003, and the American Recovery and Reinvestment Act (ARRA), expire at the end of 2012;
- The two-year extension of provisions designed to limit the reach of the alternative minimum tax, extensions of emergency unemployment compensation, and the one-year reduction in the payroll tax all expire at the end of 2011;
- Sharp reductions in Medicare's payment rates for physicians' services take effect at the end of 2011;
- Funding for discretionary spending declines over time in real terms, in accordance with the caps established under the Budget Control Act; and
- Additional deficit reduction totaling \$1.2 trillion over the 2012–2021 period will be implemented as required under the Budget Control Act.

If some of the changes specified in current law did not occur and current policies were continued instead, much larger deficits and much greater debt could result. For example, if most of the provisions in the 2010 tax act that were originally enacted in 2001, 2003, 2009, and 2010 were extended (rather than allowed to expire on December 31, 2012, as scheduled); the alternative minimum tax was indexed for inflation; and cuts to Medicare's payment rates for physicians' services were prevented, then annual deficits from 2012 through 2021 would average 4.3 percent of GDP, compared with 1.8 percent in CBO's baseline projections (see Summary Figure 1). With cumulative deficits during that decade of nearly \$8.5 trillion, debt held by the public would reach 82 percent of GDP by the end of 2021, higher than in any year since 1948.

Beyond the 10-year projection period, further increases in federal debt relative to the nation's output almost surely lie ahead if certain policies remain in place. The aging of the population and rising costs for health care will push federal spending up considerably as a

percentage of GDP. If that higher level of spending is coupled with revenues that are held close to their average share of GDP for the past 40 years (rather than being allowed to increase, as under current law), the resulting deficits will cause federal debt to skyrocket. To prevent debt from becoming unsupportable, policymakers will have to substantially restrain the growth of spending, raise revenues significantly above their historical share of GDP, or pursue some combination of those two approaches.

The Economic Outlook

The slow pace of the current recovery is broadly consistent with international experience of recoveries following financial crises. In the aftermath of such a crisis, it takes time for households to rebuild their wealth and pay down their debts, for financial institutions to restore their capital bases and the supply of credit, and for businesses to regain the confidence necessary to invest in new facilities and equipment. Moreover, the boom in housing construction that preceded the financial crisis has left a substantial oversupply of vacant homes that will take time to work through.

Although some of the factors contributing to economic weakness in the first half of calendar year 2011 (such as the spike in oil prices) are not expected to persist, CBO expects the pace of growth to be restrained for several more years by the lingering effects of overbuilding, the financial crisis, and the recession. In addition, federal fiscal policy (including scheduled tax increases as well as caps on discretionary spending and other reductions required under the Budget Control Act) will provide decreasing support for the economy and thereby restrain economic growth over the next few years.

Taking those factors into account, CBO projects that real GDP will increase at a modest pace, on average, through 2013—driven by continued strength in business investment, modest increases in consumer spending, and expansions in net exports and residential investment (see Summary Table 2 on page xiii). The slow growth in output will generate only a moderate decline in the unemployment rate, which is projected to stay above 8 percent through 2013. With the amount of excess productive capacity in the economy expected to remain substantial, CBO projects that the inflation rate—as measured by the price index for personal consumption

Summary Table 1.**CBO's Baseline Budget Outlook**

													Total	
	Actual, 2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2012- 2016	2012- 2021
In Billions of Dollars														
Projection Excluding Effects of Provisions Related to the Joint Select Committee on Deficit Reduction														
Revenues	2,163	2,314	2,635	3,069	3,423	3,665	3,847	4,087	4,286	4,508	4,731	4,969	16,640	39,221
Outlays	3,456	3,597	3,609	3,692	3,803	3,988	4,249	4,449	4,635	4,913	5,161	5,409	19,340	43,908
Deficit	-1,294	-1,284	-973	-623	-380	-322	-402	-362	-349	-405	-430	-440	-2,701	-4,687
Effects of Provisions Related to the Joint Select Committee on Deficit Reduction ^a	0	0	0	113	115	118	124	132	139	146	154	161	469	1,200
Total Deficit	-1,294	-1,284	-973	-510	-265	-205	-278	-231	-211	-259	-277	-279	-2,232	-3,487
Debt Held by the Public at the End of the Year	9,019	10,164	11,153	11,773	12,148	12,463	12,840	13,169	13,473	13,820	14,181	14,541	n.a.	n.a.
As a Percentage of Gross Domestic Product														
Projection Excluding Effects of Provisions Related to the Joint Select Committee on Deficit Reduction														
Revenues	14.9	15.3	16.8	19.0	20.2	20.2	20.1	20.4	20.5	20.6	20.7	20.9	19.3	20.0
Outlays	23.8	23.8	23.0	22.8	22.4	22.0	22.2	22.2	22.1	22.4	22.6	22.7	22.5	22.4
Deficit	-8.9	-8.5	-6.2	-3.9	-2.2	-1.8	-2.1	-1.8	-1.7	-1.8	-1.9	-1.8	-3.1	-2.4
Effects of Provisions Related to the Joint Select Committee on Deficit Reduction ^a	0	0	0	0.7	0.7	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.5	0.6
Total Deficit	-8.9	-8.5	-6.2	-3.2	-1.6	-1.1	-1.5	-1.2	-1.0	-1.2	-1.2	-1.2	-2.6	-1.8
Debt Held by the Public at the End of the Year	62.1	67.3	71.2	72.8	71.6	68.7	67.2	65.8	64.3	63.1	62.0	61.0	n.a.	n.a.

Source: Congressional Budget Office.

Notes: The Budget Control Act of 2011 (Public Law 112-25) created the Joint Select Committee on Deficit Reduction to propose further deficit reduction totaling at least \$1.5 trillion over 10 years. The act also specified automatic procedures for reducing spending by as much as \$1.2 trillion if legislation originating with the new deficit reduction committee does not achieve savings of at least \$1.2 trillion. CBO has incorporated that amount of deficit reduction (which includes savings in debt-service costs) in its baseline but has no basis for allocating that amount between revenues and outlays. Policy changes were allocated evenly across the 2013–2021 period; the incremental increase in the annual effects results from the compounding of debt-service savings.

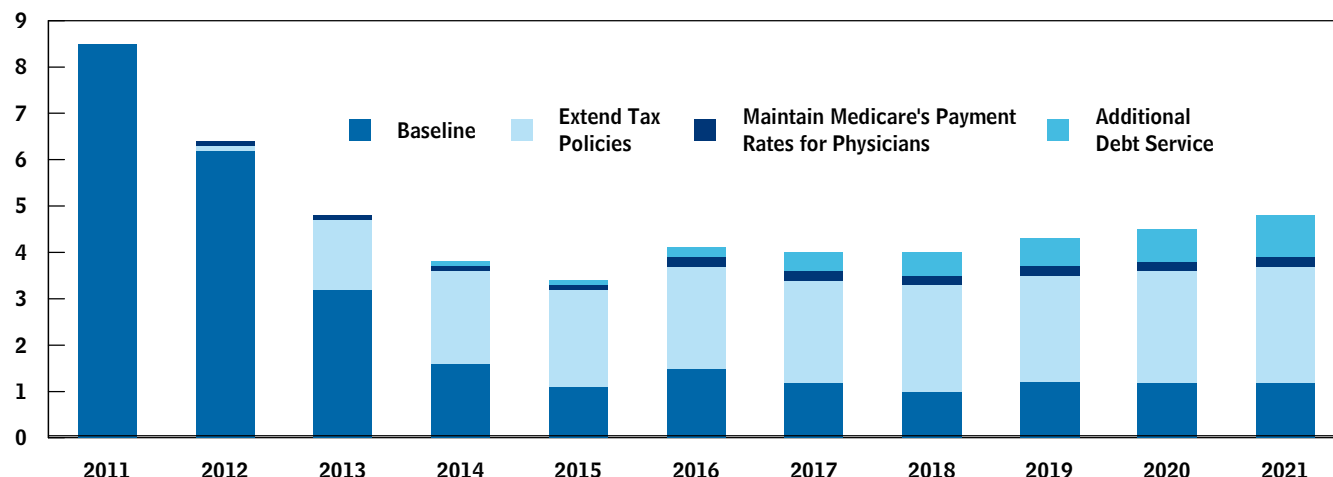
n.a. = not applicable.

a. Includes effects on debt service.

Summary Figure 1.

Deficits in CBO's Baseline and Assuming a Continuation of Certain Policies

(Percentage of gross domestic product)



Source: Congressional Budget Office.

Note: "Extend Tax Policies" reflects the following policy assumptions: Most of the provisions in the 2010 tax act that were originally enacted in 2001, 2003, 2009, and 2010 are extended (instead of being allowed to expire on December 31, 2012, as scheduled), and the alternative minimum tax is indexed for inflation. "Maintain Medicare's Payment Rates for Physicians" involves preventing the nearly 30 percent reduction in Medicare's payment rates for physicians' services that is scheduled to take effect at the end of 2011. "Additional Debt Service" is the amount of interest payments on the additional debt issued to the public that would result from the continuation of the specified policies.

expenditures—will be 1.3 percent in both 2012 and 2013, down from 2.4 percent this year. Under those economic conditions, interest rates are likely to remain unusually low.

After 2013, according to CBO's projections, growth in real GDP will pick up, the unemployment rate will fall more sharply, the inflation rate will eventually rise to 2.0 percent, and interest rates will climb to more-typical levels. By 2017, in the agency's projections, real GDP will equal its potential, and the unemployment rate will be down to 5.2 percent. For the 2017–2021 period, CBO's economic projections are based on trends in factors that underlie the economy's potential output, including the labor force, capital accumulation, and productivity. The projections therefore do not explicitly incorporate fluctuations resulting from the business cycle. In those projections, the growth of real GDP averages 2.4 percent between 2017 and 2021, and the unemployment rate averages 5.2 percent.

CBO initially completed its economic forecast in early July, but it updated the forecast in early August to reflect the policy changes enacted in the Budget Control Act.

However, the forecast described here does not reflect any other developments since early July, including the recent swings in financial markets, weakness in certain economic indicators, and the annual revision to the national income and product accounts. Incorporating that news would have led CBO to temper its near-term forecast for economic growth.

Economic forecasts are always subject to a considerable degree of uncertainty, but the uncertainty surrounding CBO's current forecast is especially great because the present business cycle has been unusual in a variety of ways. Many developments, such as changes in the extent to which households want to reduce their debt burdens further, could cause economic outcomes to differ substantially, in one direction or the other, from those CBO has projected.

The Budget Outlook

The deficit that CBO projects for 2011 is lower than what the agency estimated in March. Nevertheless, this year's shortfall—at 8.5 percent of GDP—will still be

Summary Table 2.**CBO's Economic Projections for Calendar Years 2011 to 2021**

	Forecast		Projected Annual Average	
	2011	2012	2013-2016	2017-2021
Fourth Quarter to Fourth Quarter (Percentage change)				
Real GDP	2.3	2.7	3.6	2.4
Inflation				
PCE price index	2.4	1.3	1.6	2.0
Core PCE price index ^a	1.7	1.4	1.6	2.0
Consumer price index ^b	2.8	1.3	1.7	2.3
Core consumer price index ^a	1.7	1.3	1.7	2.2
Fourth-Quarter Level (Percent)				
Unemployment Rate	8.9	8.5	5.3 ^c	5.2 ^d
Calendar Year Average (Percent)				
Interest Rates				
Three-month Treasury bills	0.1	0.1	1.5	4.0
Ten-year Treasury notes	3.3	3.2	4.1	5.3

Source: Congressional Budget Office.

Notes: Economic projections for each year from 2011 to 2021 appear in Appendix B.

GDP = gross domestic product; PCE = personal consumption expenditures.

- a. Excludes prices for food and energy.
- b. The consumer price index for all urban consumers.
- c. Value for 2016.
- d. Value for 2021.

much larger than the average annual deficit of 2.8 percent experienced over the past 40 years. The historically high deficits of recent years have pushed debt held by the public from 40 percent of GDP at the end of 2008 to an estimated 67 percent at the end of this year.

The deficit for 2011 reflects a difference between federal revenues that are much lower than average and federal outlays that are much higher than average. According to CBO's estimates, revenues this year will amount to 15.3 percent of GDP, compared with an average of 18.0 percent over the past 40 years, and outlays will amount to 23.8 percent of GDP, well above their 40-year average of 20.8 percent. The gap between revenues and outlays results from a combination of factors: an imbalance between revenues and spending that predated the recession, sharply lower revenues and elevated spending associated with the severe drop in economic activity, and the costs of various federal policies implemented in response to those conditions.

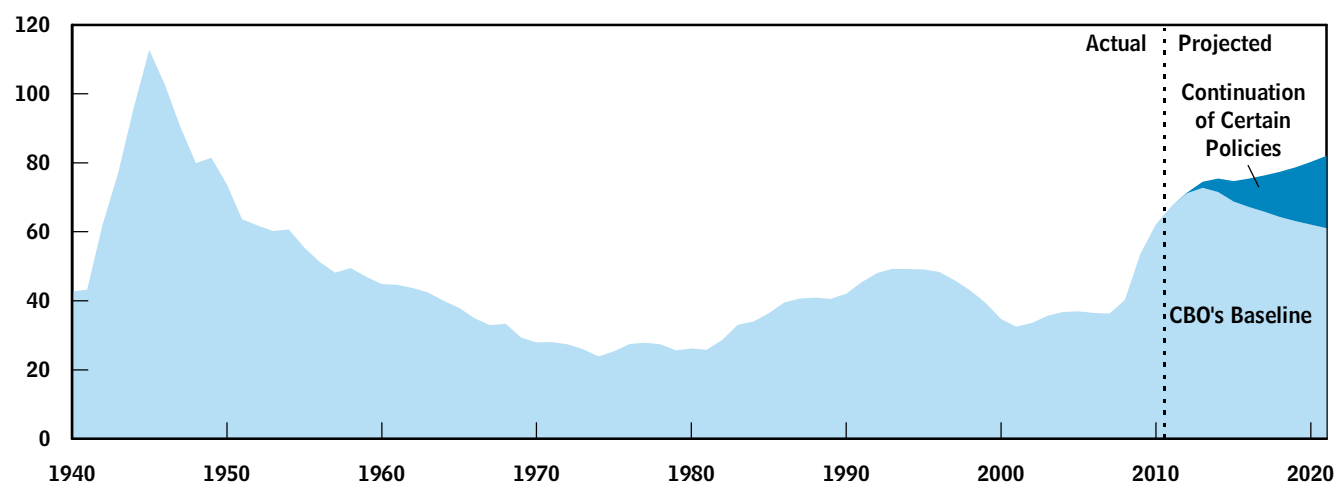
The future paths of federal deficits and debt will depend on the strength of the economic recovery and the fiscal policies followed by the federal government. CBO's base-line estimates, which are predicated on the assumption that current law remains unchanged, show deficits falling markedly as a percentage of GDP over the next few years—to 3.2 percent by 2013. From 2014 through 2021, deficits under current law will range between 1.0 percent and 1.6 percent of GDP.

Much of the projected decline in deficits occurs because revenues will climb sharply under current law, in large part owing to the expiration of tax provisions enacted during the past 10 years. Structural features of the individual income tax and the economic recovery also will gradually boost revenues relative to GDP. Under CBO's current-law projections, revenues rise from 16.8 percent of GDP in 2012 to 20.2 percent in 2014 and to 20.9 percent in 2021. Higher receipts from individual income taxes account for nearly three-quarters of the

Summary Figure 2.

Federal Debt Held by the Public—Historically, in CBO’s Baseline, and with a Continuation of Certain Policies

(Percentage of gross domestic product)



Source: Congressional Budget Office.

Note: The projected debt with the continuation of certain policies is based on several assumptions: first, that most of the provisions of the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (Public Law 111-312) that originally were enacted in 2001, 2003, 2009, and 2010 do not expire on December 31, 2012, but instead continue; second, that the alternative minimum tax is indexed for inflation after 2011; and third, that Medicare’s payment rates for physicians are held constant at their 2011 level.

growth in revenues over the next 10 years. (Those projections do not include any changes to tax policy that may arise from the Joint Select Committee on Deficit Reduction created by the Budget Control Act.)

Federal spending as a percentage of GDP declines through 2015 in CBO’s baseline projections, reaching 22.0 percent in that year. Much of that decrease stems from the waning of the additional spending funded through ARRA, lower projected spending for unemployment compensation and refundable tax credits, and the effects of the caps imposed on discretionary spending by the Budget Control Act. After 2015, spending for mandatory programs such as Social Security, Medicare, Medicaid, and other health care programs is projected to increase relative to GDP, while spending on programs funded through discretionary appropriations is projected to continue falling.

In 2021, under CBO’s projections based on current law, total federal spending will be 22.7 percent of GDP. Mandatory spending will amount to 13.8 percent of GDP in that year—slightly above the 13.4 percent expected for

this year and well above the average of 9.9 percent over the past 40 years; and discretionary spending will amount to 6.1 percent of GDP—well below both the 9.0 percent estimated for 2011 and the 40-year average of 8.7 percent. (As with the baseline projections for revenues, the projections for outlays over the 2012–2021 period do not include any changes deriving from the deficit reduction committee.)

With modest deficits projected for the latter part of the 2012–2021 period under CBO’s current-law baseline, debt held by the public recedes as a percentage of GDP. Even though such debt will continue to accumulate each year, rising from \$10.2 trillion this year to \$14.5 trillion at the end of 2021, it will fall from 67 percent of GDP in 2011 to an estimated 61 percent in 2021.

Under different policies than those specified in current law, the future path of debt held by the public could be quite different. For example, if lawmakers enacted policies that reduced deficits by more than the \$1.2 trillion assumed in CBO’s baseline as a result of the process established in the Budget Control Act, debt held by the

public would be lower than the amounts estimated in the baseline.¹ However, if certain policy changes that are part

-
1. Under the Budget Control Act, the new deficit reduction committee is assigned a goal of achieving \$1.5 trillion in cumulative budgetary savings over the 2012–2021 period; however, automatic cuts to spending (as specified in that act) will occur if lawmakers do not enact legislation stemming from the committee's proposals that achieves at least \$1.2 trillion in estimated savings over the next 10 years.

of current law are not permitted to unfold as scheduled, debt held by the public could be much higher. Maintaining certain policies that are currently in effect—by extending certain tax provisions slated to expire and preventing cuts to payments for physicians' services under Medicare—would boost cumulative deficits over the next 10 years by \$5 trillion above the amounts projected in the baseline, pushing debt held by the public up to 82 percent of GDP by the end of 2021 (see Summary Figure 2).

The Budget Outlook

The Congressional Budget Office (CBO) estimates that the budget deficit in 2011 will total nearly \$1.3 trillion. At 8.5 percent of gross domestic product (GDP), this year's deficit will be the third-largest shortfall measured as a share of the nation's output in the past 65 years, exceeded only by those in 2009 (10.0 percent) and 2010 (8.9 percent). As a result, debt held by the public will have jumped from 40 percent of GDP at the end of fiscal year 2008 to an estimated 67 percent at the end of the current fiscal year, the highest amount since 1950.

During the next several years and over the longer term, the nation faces profound challenges regarding the federal budget. The future paths of federal deficits and debt will depend crucially both on the strength of the economic recovery (discussed in Chapter 2) and on the tax and spending policies followed by the federal government. In CBO's baseline estimates, which generally reflect the assumption that current law will be unchanged, budget deficits drop markedly as a percentage of GDP over the next few years (see Table 1-1). Under current law, CBO projects, the deficit will fall to 6.2 percent of GDP in 2012 and to 3.2 percent in 2013, and then will fluctuate within a range of 1.0 percent to 1.6 percent of GDP from 2014 through 2021. Deficits will total \$3.5 trillion between 2012 and 2021, and debt held by the public will equal 61 percent of GDP by 2021—well above the annual average of 37 percent recorded from 1971 to 2010.

However, the budgetary challenges facing the federal government are not fully reflected in CBO's baseline projections because current law provides for substantial changes to tax and spending policies in coming years. If those changes did not occur and current policies were continued instead, much larger deficits and much greater debt would result. Specifically, current law includes the following features whose modification or elimination could significantly increase future deficits and debt:

- Provisions of the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (Public Law 111-312, referred to in this report as the 2010 tax act) that reduced the payroll tax for one year and limited the reach of the alternative minimum tax (AMT) for two years are set to expire on December 31, 2011.
- Several other key provisions of the 2010 tax act—including the extension of lower tax rates and expanded credits and deductions originally enacted in the Economic Growth and Tax Relief Reconciliation Act of 2001, the Jobs and Growth Tax Relief Reconciliation Act of 2003, and the American Recovery and Reinvestment Act of 2009 (ARRA, P.L. 111-5)—are set to expire on December 31, 2012.
- Medicare's payments for physicians' services are scheduled to be reduced by nearly 30 percent after December 31, 2011.
- Discretionary appropriations between 2012 and 2021 will be subject to statutory caps set in the Budget Control Act of 2011 (P.L. 112-25). If adhered to, those caps will reduce discretionary outlays by about 5 percent in real (inflation-adjusted) terms over the 2012–2021 period relative to spending in 2011, CBO estimates.
- Additional budgetary savings of \$1.2 trillion required by the Budget Control Act will occur as a result of legislation produced by the Joint Select Committee on Deficit Reduction (referred to in this report as the deficit reduction committee) or, if lawmakers fail to enact such legislation, by means of automatic cuts in spending that will then be triggered. (For a more detailed discussion of the Budget Control Act, see Box 1-1 on page 6.)

Table 1-1.**Projected Deficits in CBO's Baseline**

(Billions of dollars)

	Actual, 2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total 2012- 2016 2012- 2021	
Deficit Excluding Effects of Provisions Related to the Joint Select Committee on Deficit Reduction	-1,294	-1,284	-973	-623	-380	-322	-402	-362	-349	-405	-430	-440	-2,701	-4,687
Effects of Those Provisions	0	0	0	113	115	118	124	132	139	146	154	161	469	1,200
Total Deficit														
In billions of dollars	-1,294	-1,284	-973	-510	-265	-205	-278	-231	-211	-259	-277	-279	-2,232	-3,487
As a percentage of GDP	-8.9	-8.5	-6.2	-3.2	-1.6	-1.1	-1.5	-1.2	-1.0	-1.2	-1.2	-1.2	-2.6	-1.8
Memorandum:														
Debt Held by the Public at the End of the Year (Percentage of GDP)	62.1	67.3	71.2	72.8	71.6	68.7	67.2	65.8	64.3	63.1	62.0	61.0	n.a.	n.a.

Source: Congressional Budget Office.

Notes: The Budget Control Act of 2011 (Public Law 112-25) created the Joint Select Committee on Deficit Reduction to propose further deficit reduction totaling at least \$1.5 trillion over 10 years. The act also specified automatic procedures for reducing spending by as much as \$1.2 trillion if legislation originating with the new deficit reduction committee does not achieve savings of at least \$1.2 trillion. CBO has incorporated that amount of deficit reduction (which includes savings in debt-service costs) in its baseline but has no basis for allocating that amount between revenues and outlays. Policy changes were allocated evenly across the 2013–2021 period; the incremental increase in the annual effects results from the compounding of debt-service savings.

GDP = gross domestic product; n.a. = not applicable.

Assuming that those provisions of current law all remain in place, CBO projects that revenues will rise sharply—from 15.3 percent of GDP in 2011 to 20.2 percent in 2014 and to 20.9 percent by 2021 (see Table 1-2 on page 4). Outlays, by contrast, are projected to decrease as a percentage of GDP over the next few years, falling from 23.8 percent of GDP in 2011 to a low of 22.0 percent of GDP in 2015, before increasing again to 22.7 percent by 2021. (Those revenue and outlay projections exclude the effects of changes that might occur as a result of provisions of the Budget Control Act related to the deficit reduction committee because CBO cannot predict what those changes might be.) By comparison, during the past 40 years, revenues have represented 18.0 percent of GDP, on average, and outlays have represented 20.8 percent.¹

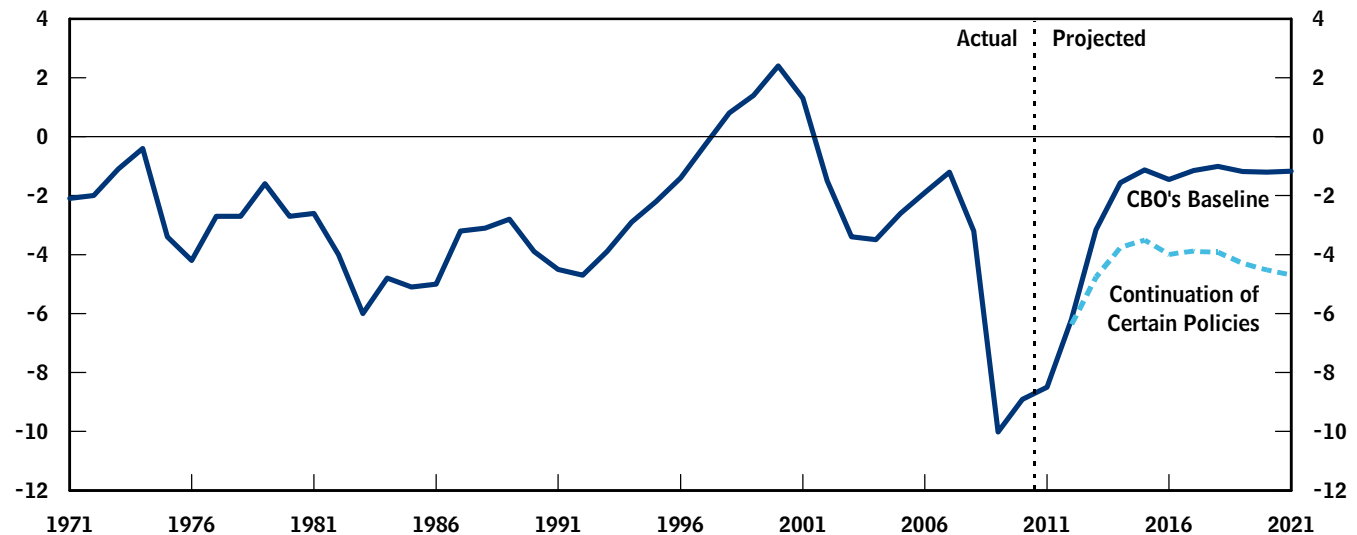
Changing provisions of current law so as to maintain major policies that are in effect now would produce markedly different budgetary outcomes. For example, if most of the provisions in the 2010 tax act were extended (rather than allowed to expire on December 31, 2012) and if the AMT was indexed for inflation, CBO projects that annual revenues would average 18 percent of GDP from 2012 through 2021 rather than the 20 percent

1. In 2021, discretionary outlays are projected to be 6.1 percent of GDP, well below their 40-year average of 8.7 percent, and mandatory outlays are projected to be 13.8 percent of GDP, well above their 40-year average of 9.9 percent. (The remaining outlays are net interest payments.)

Figure 1-1.

Total Deficits or Surpluses—Historically, in CBO’s Baseline, and with a Continuation of Certain Policies

(Percentage of gross domestic product)



Source: Congressional Budget Office.

Note: The projected deficit with the continuation of certain policies is based on several assumptions: first, that most of the provisions of the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (Public Law 111-312) that originally were enacted in 2001, 2003, 2009, and 2010 do not expire on December 31, 2012, but instead continue; second, that the alternative minimum tax is indexed for inflation after 2011; and third, that Medicare’s payment rates for physicians are held constant at their 2011 level.

shown in the baseline projections.² If Medicare’s payment rates for physicians’ services also were held constant, then deficits from 2012 through 2021 would average 4.3 percent of GDP, compared with the 1.8 percent in the baseline (see Figure 1-1). With cumulative deficits during that decade of nearly \$8.5 trillion under such policies, debt held by the public would reach 82 percent of GDP by the end of 2021, higher than in any year since 1948.

CBO’s current baseline projections show smaller deficits than the agency estimated earlier this year.³ The estimated deficit for 2011 is \$116 billion less than projected in March, primarily because of higher-than-anticipated revenues from individual income taxes. CBO expects total revenues in 2011 to exceed its March estimate by \$84 billion, or 4 percent. Outlays for the year are anticipated to be \$32 billion (about 1 percent) lower than the March estimate.

CBO’s projection of the cumulative deficit for the 2012–2021 period totals \$3.5 trillion under current law, about \$3.3 trillion below its previous projection. Nearly two-thirds of the reduction is the result of provisions in the Budget Control Act. Another one-fifth is attributable to lower projected interest rates during the coming decade;

2. That alternative is based on an assumption that the lower tax rates, expanded credits, and higher deductions enacted in 2001, 2003, and 2009 and then extended through 2012 by the 2010 tax act are made permanent. It also reflects an assumption that the estate and gift tax rules for 2011 and 2012 (as established by the 2010 tax act) continue permanently beyond their currently scheduled expiration in 2012. Furthermore, it incorporates an assumption that the higher AMT exemption contained in the 2010 tax act does not expire at the end of 2011 and is indexed to inflation thereafter. Finally, it does not incorporate any changes in revenues that may result from the work of the deficit reduction committee.

3. See Congressional Budget Office, *An Analysis of the President’s Budgetary Proposals for Fiscal Year 2012* (April 2011); and “Preliminary Analysis of the President’s Budget for 2012,” attachment to a letter to the Honorable Daniel K. Inouye (March 18, 2011).

Table 1-2.**CBO's Baseline Budget Projections**

													Total	
	Actual, 2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2012- 2016	2012- 2021
In Billions of Dollars														
Revenues														
Individual income taxes	899	1,089	1,209	1,510	1,666	1,843	1,985	2,129	2,257	2,393	2,534	2,679	8,214	20,204
Social insurance taxes	865	816	924	996	1,055	1,123	1,188	1,242	1,296	1,351	1,412	1,473	5,286	12,060
Corporate income taxes	191	192	279	336	431	416	385	418	420	431	435	448	1,848	4,000
Other	208	217	223	227	270	283	289	298	313	333	351	369	1,292	2,958
Total Revenues	2,163	2,314	2,635	3,069	3,423	3,665	3,847	4,087	4,286	4,508	4,731	4,969	16,640	39,221
On-budget	1,531	1,752	1,982	2,359	2,678	2,869	3,000	3,194	3,348	3,527	3,704	3,897	12,888	30,557
Off-budget	632	562	653	710	746	796	847	894	937	981	1,027	1,073	3,752	8,664
Outlays														
Mandatory spending	1,913	2,023	2,056	2,129	2,211	2,340	2,511	2,616	2,721	2,918	3,095	3,282	11,247	25,879
Discretionary spending	1,347	1,353	1,315	1,300	1,301	1,311	1,332	1,350	1,370	1,404	1,434	1,464	6,559	13,580
Net interest	196	221	238	263	291	336	407	484	545	591	632	663	1,535	4,449
Total Outlays	3,456	3,597	3,609	3,692	3,803	3,988	4,249	4,449	4,635	4,913	5,161	5,409	19,340	43,908
On-budget	2,902	3,097	3,022	3,036	3,110	3,260	3,483	3,639	3,776	4,000	4,189	4,376	15,911	35,891
Off-budget	555	500	586	656	692	728	766	810	859	913	972	1,033	3,429	8,017
Deficit (-) or Surplus Excluding Effects of Provisions Related to the Joint Select Committee on Deficit Reduction														
	-1,294	-1,284	-973	-623	-380	-322	-402	-362	-349	-405	-430	-440	-2,701	-4,687
On-budget	-1,371	-1,345	-1,040	-676	-433	-391	-483	-446	-428	-473	-485	-480	-3,023	-5,334
Off-budget	77	61	67	53	53	68	81	84	78	68	55	39	323	647
Effects of Those Provisions ^a														
Policy changes	0	0	0	111	111	111	111	111	111	111	111	111	446	1,003
Debt service	0	0	0	1	3	6	12	20	27	35	42	50	23	197
Total Effects	0	0	0	113	115	118	124	132	139	146	154	161	469	1,200
Total Deficit	-1,294	-1,284	-973	-510	-265	-205	-278	-231	-211	-259	-277	-279	-2,232	-3,487
Debt Held by the Public at the End of the Year														
	9,019	10,164	11,153	11,773	12,148	12,463	12,840	13,169	13,473	13,820	14,181	14,541	n.a.	n.a.

Continued

even with that downward revision, the projected rates are roughly equal to or higher than the rates now expected by participants in financial markets. The remaining net reduction in the projected deficit stems from a variety of other factors. (Changes to CBO's baseline projections since March are detailed in Appendix A.)

During the coming decade and over the long term, the aging of the population and rising health care costs will continue to exert significant pressure on the budget. The number of people age 65 or older will increase by roughly

one-third between 2011 and 2021, causing that segment of the U.S. population to climb from 13 percent to 17 percent of the total; beyond 2021, that share will rise further. In addition, the major health care legislation enacted in 2010 will increase the number of beneficiaries of federal health care programs, and CBO projects that the costs of those programs per beneficiary will continue rising (albeit at different rates because of differences in the laws that govern them). All together, outlays for Social Security, Medicare, and Medicaid—which will account for 44 percent of all federal noninterest spending

Table 1-2.

Continued

CBO's Baseline Budget Projections

	Actual,												Total	
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2012- 2016	2012- 2021
As a Percentage of Gross Domestic Product														
Revenues														
Individual income taxes	6.2	7.2	7.7	9.3	9.8	10.2	10.4	10.6	10.8	10.9	11.1	11.2	9.5	10.3
Social insurance taxes	6.0	5.4	5.9	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.1	6.2
Corporate income taxes	1.3	1.3	1.8	2.1	2.5	2.3	2.0	2.1	2.0	2.0	1.9	1.9	2.1	2.0
Other	1.4	1.4	1.4	1.4	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Total Revenues	14.9	15.3	16.8	19.0	20.2	20.2	20.1	20.4	20.5	20.6	20.7	20.9	19.3	20.0
On-budget	10.6	11.6	12.7	14.6	15.8	15.8	15.7	15.9	16.0	16.1	16.2	16.4	15.0	15.6
Off-budget	4.4	3.7	4.2	4.4	4.4	4.4	4.4	4.5	4.5	4.5	4.5	4.5	4.4	4.4
Outlays														
Mandatory spending	13.2	13.4	13.1	13.2	13.0	12.9	13.1	13.1	13.0	13.3	13.5	13.8	13.1	13.2
Discretionary spending	9.3	9.0	8.4	8.0	7.7	7.2	7.0	6.7	6.5	6.4	6.3	6.1	7.6	6.9
Net interest	1.4	1.5	1.5	1.6	1.7	1.9	2.1	2.4	2.6	2.7	2.8	2.8	1.8	2.3
Total Outlays	23.8	23.8	23.0	22.8	22.4	22.0	22.2	22.2	22.1	22.4	22.6	22.7	22.5	22.4
On-budget	20.0	20.5	19.3	18.8	18.3	18.0	18.2	18.2	18.0	18.3	18.3	18.4	18.5	18.3
Off-budget	3.8	3.3	3.7	4.1	4.1	4.0	4.0	4.0	4.1	4.2	4.3	4.3	4.0	4.1
Deficit (-) or Surplus Excluding Effects of Provisions Related to the Joint Select Committee on Deficit Reduction														
On-budget	-8.9	-8.5	-6.2	-3.9	-2.2	-1.8	-2.1	-1.8	-1.7	-1.8	-1.9	-1.8	-3.1	-2.4
Off-budget	-9.4	-8.9	-6.6	-4.2	-2.5	-2.2	-2.5	-2.2	-2.0	-2.2	-2.1	-2.0	-3.5	-2.7
	0.5	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.2	0.2	0.4	0.3
Effects of Those Provisions ^a														
Policy changes	0	0	0	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5
Debt service	0	0	0	*	*	*	0.1	0.1	0.1	0.2	0.2	0.2	*	0.1
Total Effects	0	0	0	0.7	0.7	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.5	0.6
Total Deficit	-8.9	-8.5	-6.2	-3.2	-1.6	-1.1	-1.5	-1.2	-1.0	-1.2	-1.2	-1.2	-2.6	-1.8
Debt Held by the Public at the End of the Year														
	62.1	67.3	71.2	72.8	71.6	68.7	67.2	65.8	64.3	63.1	62.0	61.0	n.a.	n.a.
Memorandum:														
Gross Domestic Product														
(Billions of dollars)	14,512	15,095	15,663	16,182	16,974	18,132	19,110	20,028	20,948	21,901	22,856	23,830	86,062	195,624

Source: Congressional Budget Office.

Notes: The Budget Control Act of 2011 (Public Law 112-25) created the Joint Select Committee on Deficit Reduction to propose further deficit reduction totaling at least \$1.5 trillion over 10 years. The act also specified automatic procedures for reducing spending by as much as \$1.2 trillion if legislation originating with the new deficit reduction committee does not achieve savings of at least \$1.2 trillion. CBO has incorporated that amount of deficit reduction (which includes savings in debt-service costs) in its baseline but has no basis for allocating that amount between revenues and outlays. Policy changes were allocated evenly across the 2013–2021 period; the incremental increase in the annual effects results from the compounding of debt-service savings.

n.a. = not applicable; * = between zero and 0.05 percent.

a. Positive numbers indicate a decrease in the deficit.

Box 1-1.**The Budget Control Act of 2011**

On August 2, 2011, the President signed the Budget Control Act of 2011 (Public Law 112-25) into law.¹ Provisions in that act:

- Establish caps on discretionary funding through 2021;
- Allow certain amounts of additional spending for “program integrity” initiatives aimed at curtailing improper benefit payments;
- Change the Pell Grant and student loan programs;
- Require the House of Representatives and the Senate to vote on a joint resolution proposing a balanced budget amendment to the Constitution;
- Establish a procedure for increasing the debt limit by \$400 billion initially and procedures to raise the limit again in two additional steps, for a cumulative increase of between \$2.1 trillion and \$2.4 trillion;
- Reinstate and modify certain budget process rules;
- Create the Congressional Joint Select Committee on Deficit Reduction to propose further reductions that will amount to at least \$1.5 trillion in budgetary savings over 10 years; and
- Establish automatic procedures for reducing spending by as much as \$1.2 trillion if legislation originating with the new deficit reduction committee does not achieve such savings.

1. For an analysis of the Budget Control Act of 2011, see Congressional Budget Office, [letter to the Honorable John A. Boehner and the Honorable Harry Reid estimating the impact on the deficit of the Budget Control Act of 2011](#) (August 1, 2011). The estimates discussed here do not include the effect of program integrity initiatives, which depend on future appropriations and will be incorporated into CBO’s baseline if they are implemented in the future.

Discretionary Caps

The Budget Control Act imposes caps on appropriations of new discretionary budget authority that start at \$1,043 billion in 2012 and reach \$1,234 billion in 2021. For 2012 and 2013, separate caps for “security” and “nonsecurity” budget authority will be in effect; from 2014 through 2021, only one cap will apply to total discretionary funding.²

The law allows for adjustments to the discretionary caps when appropriations are provided for certain purposes. Funding for the wars in Afghanistan and Iraq or similar activities (sometimes called overseas contingency operations) would lead to an increase in the caps, as would other funding designated as an emergency requirement. Furthermore, the law allows for an increase in the caps if additional budget authority is provided for program integrity initiatives aimed at reducing improper benefit payments in the Disability Insurance and Supplemental Security Income programs, Medicare, Medicaid, and the Children’s Health Insurance Program. Finally, the caps would be increased if appropriations were provided for disaster relief, but the adjustments would be limited on the basis of historical averages for such funding.

If appropriations in the next 10 years are equal to the caps on discretionary spending, the Congressional Budget Office estimates, implementing those caps will reduce budget deficits by \$756 billion between 2012 and 2021 (not counting the savings in interest payments that will result from lower outlays; see the table).

2. For the purpose of enforcing those discretionary caps, the security category comprises discretionary appropriations for the Department of Defense, the Department of Homeland Security, the Department of Veterans Affairs, the National Nuclear Security Administration, the intelligence community management account (95-0401-0-1-054), and discretionary accounts in budget function 150 (international affairs). The nonsecurity category comprises all discretionary appropriations not included in the security category.

Continued

Box 1-1.**Continued****The Budget Control Act of 2011****Effect of the Budget Control Act of 2011 on Projected Deficits in CBO's Baseline**

(Billions of dollars)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total, 2012–2021
Discretionary Caps	-25	-47	-59	-67	-74	-81	-89	-97	-104	-112	-756
Education Provisions	3	6	3	-2	-2	-2	-2	-2	-2	-3	-5
Debt Service ^a	*	-1	-2	-3	-7	-12	-18	-24	-30	-37	-134
Total Effect on the Deficit Excluding Provisions Related to the Joint Select Committee on Deficit Reduction	-22	-42	-58	-73	-84	-96	-109	-123	-137	-152	-895
Provisions Related to the Joint Select Committee on Deficit Reduction											
Policy changes ^b	n.a.	-111	-111	-111	-111	-111	-111	-111	-111	-111	-1,003
Debt service	n.a.	-1	-3	-6	-12	-20	-27	-35	-42	-50	-197
Total Effect on the Deficit	-22	-155	-173	-190	-208	-227	-248	-269	-290	-313	-2,095

Source: Congressional Budget Office.

Note: * = between -\$500 million and zero; n.a. = not applicable.

- a. Debt-service reductions were calculated using CBO's August 2011 forecast for interest rates. Rates in that forecast are lower than the interest rates that CBO forecast earlier in the year and used in its August 1, 2011, estimate of the impact of the Budget Control Act.
- b. CBO has allocated the policy changes evenly from 2013 through 2021. The composition of that additional deficit reduction over time and across budget categories will depend on the specific provisions of any legislation stemming from the committee's proposals and the extent of any automatic reductions that would be triggered.

Overall Budgetary Impact of the Act

The law's changes to education programs will reduce mandatory outlays over the 2012–2021 period by \$5 billion. The savings in interest on the public debt because of the lower deficits resulting from those changes and the discretionary caps will come to \$134 billion, CBO estimates. (Those reductions in interest on the public debt were calculated using CBO's August 2011 forecast for interest rates. Rates in that forecast are lower than those that CBO forecast earlier in the year and used in its August 1, 2011, estimate of the impact of the Budget Control Act.) In

addition, legislation originating with the deficit reduction committee, or the automatic reductions in spending that will occur in the absence of such legislation, will reduce deficits by \$1.2 trillion over the 10-year period. The composition of that additional deficit reduction over time and across budget categories will depend on the specific provisions of any legislation stemming from the committee's proposals and the extent of any automatic reductions that would be triggered. Overall, the deficit reduction stemming from the act is estimated to total \$2.1 trillion over the 2012–2021 period.

in 2011—will continue to rise relative to GDP and to consume a growing share of the federal budget. To keep deficits and debt from causing substantial harm to the economy, policymakers would need to allow revenues to increase to a much higher percentage of GDP than the average over the past 40 years, to substantially restrain the growth of spending of large federal programs, or to pursue some combination of the two approaches.

The Budget Deficit, Revenues, and Outlays in 2011

In the absence of additional legislation that would affect spending or revenues this year, the deficit in 2011 will be nearly unchanged from the \$1.3 trillion budget imbalance recorded in 2010, CBO estimates. As a percentage of GDP, the 2011 deficit is projected to equal 8.5 percent, about 0.4 percentage points lower than in 2010.

Total revenues are expected to grow by about 7 percent in 2011, a faster pace than the increase of 3 percent recorded last year (see Table 1-3). Outlays, which fell last year largely as a result of reductions in the estimated cost of the Troubled Asset Relief Program (TARP), will increase by about 4 percent this year, CBO estimates, a rate well below the annual average growth rate of nearly 7 percent between 2001 and 2010.

Revenues in 2011

On the basis of tax collections through July 2011, CBO expects federal revenues to total \$2.3 trillion this fiscal year, about \$150 billion more than in fiscal year 2010 (Table 1-2 on page 4). Receipts in April and May—the two peak months for processing individual income tax payments—were more than 18 percent above the amounts collected in the same months in the preceding year, primarily because of higher final payments and lower refunds related to individual income tax liabilities accrued the year before. Revenues in the other months of the year averaged about 5 percent more than those in the previous year.

CBO estimates that federal revenues will equal 15.3 percent of GDP in fiscal year 2011, slightly higher than in 2009 and 2010, but lower than in any other year since 1950 and well below the 18 percent ratio that has been the annual average over the past 40 years. Compared with last year, receipts from individual income taxes have increased both in nominal terms and as a percentage of GDP, the result of increases in withholding from employees' paychecks and in other payments. Social insurance

taxes have declined as a result of the temporary reduction in the Social Security payroll tax rate in effect for calendar year 2011. Corporate income taxes have changed little because of the roughly offsetting effects of an increase in profits and legislation that accelerated deductions for depreciation.

Individual Income Taxes. Receipts from individual income taxes are expected to increase by \$190 billion (21 percent) in 2011. Withheld individual income taxes account for almost 60 percent of the increase; wages and salaries, the main taxable base for withholding, are expected to grow by only about 3 percent during the fiscal year, but withholding has been growing faster than that. In addition, the Making Work Pay credit expired at the end of calendar year 2010, further boosting withheld taxes in 2011. The remaining growth in individual income tax receipts stems from higher nonwithheld taxes and lower refunds. Final payments made in 2011 of 2010 income taxes were about 24 percent higher than final payments made in 2010; income tax refunds were about 7 percent lower in 2011. Higher final payments and lower refunds probably reflect growth in nonwage income (such as capital gains realizations, income from businesses, interest, dividends, and pensions) in 2010.

Social Insurance Taxes. Receipts from payroll taxes that fund social insurance programs (such as Social Security and Medicare's Hospital Insurance program) will decline by \$48 billion (6 percent) in 2011, CBO estimates, because of the reduction in the payroll tax rate that took effect in January 2011. (The 2010 tax act reduced the employee's share of Social Security payroll taxes from 6.2 percent to 4.2 percent for calendar year 2011; the act also provided for transfers of general revenues to the Social Security trust funds to fully compensate for the revenues forgone because of the payroll tax cut.) That change in law, CBO estimates, will reduce receipts by about \$80 billion in 2011. Apart from the effect of the rate reduction, social insurance receipts would have increased in 2011, CBO estimates, as a result of the increase in wages and salaries.

Corporate Income Taxes. CBO anticipates that net corporate income tax receipts will total \$192 billion in 2011, about the same as in 2010, because of the offsetting effects of recent legislation and changes in corporate profits. Legislation enacted toward the end of 2010 had the effect of lowering corporate tax revenues in 2011, mainly because of provisions that allow businesses to fully expense (immediately deduct from taxable income) the

Table 1-3.

Average Annual Rates of Growth in Revenues and Outlays Since 2000 and as Projected in CBO's Baseline

(Percent)

	Actual		Projected ^a		
	2000-2009	2010	2011	2012	2013-2021
Revenues					
Individual income taxes	0.4	-1.8	21.2	11.0	9.2
Social insurance taxes	3.8	-2.9	-5.6	13.2	5.3
Corporate income taxes	-2.9	38.5	0.2	45.5	5.4
Other ^b	0.6	29.5	4.2	3.0	5.8
Total Revenues	1.4	2.7	7.0	13.9	7.3
Outlays					
Mandatory spending	8.8	-8.6	5.7	1.6	5.3
Social Security	5.8	3.4	3.5	5.9	5.8
Medicare	9.1	4.3	6.7	*	6.3
Medicaid	8.8	8.7	0.6	-5.5	9.0
Other ^c	13.0	-37.1	11.5	1.1	0.1
Discretionary spending	8.0	8.9	0.5	-2.8	1.2
Defense	9.1	4.9	2.0	n.a.	n.a.
Nondefense	6.9	13.3	-1.2	n.a.	n.a.
Net interest	-2.0	5.0	12.8	7.4	12.1
Total Outlays	7.5	-1.7	4.1	0.3	4.6
Total Outlays Excluding Net Interest	8.5	-2.1	3.6	-0.2	3.9
Memorandum:					
Consumer Price Index ^d	2.6	1.7	2.5	1.8	2.0
Nominal Gross Domestic Product	4.4	2.9	4.0	3.8	4.8
Discretionary Budget Authority	9.9	-15.3	-3.3	-1.5	1.9
Defense	9.2	2.8	-0.4	n.a.	n.a.
Nondefense	10.5	-31.1	-7.0	n.a.	n.a.

Source: Congressional Budget Office.

Notes: The growth rates in this table do not account for shifts in the timing of certain payments or receipts.

* = between -0.05 percent and zero; n.a. = not applicable.

- When constructing its baseline, CBO assumes that discretionary appropriations will adhere to the statutory caps recently enacted into law by the Budget Control Act of 2011 (Public Law 112-25). Because the caps do not constrain appropriations for military operations in Afghanistan and Iraq (or for similar activities), CBO's baseline reflects annual appropriations for war-related activities equal to \$159 billion (the amount provided for 2011), adjusted in future years for inflation. The projections for the 2012–2021 period do not include the effect of any potential changes that may occur as a result of adjustments to the caps for reasons allowed under the act or for provisions related to the Joint Select Committee on Deficit Reduction.
- Includes excise taxes, estate and gift taxes, customs duties, remittances from the Federal Reserve, and other miscellaneous receipts.
- Includes offsetting receipts (funds collected by government agencies from other government accounts or from the public in businesslike or market-oriented transactions that are recorded as offsets to outlays).
- The consumer price index for all urban consumers.

cost of equipment purchased between September 8, 2010, and December 31, 2011, and that retroactively allow partial expensing of such investments made between January 1, 2010, and September 7, 2010. Offsetting those effects on revenues were increases in domestic profits, much of which occurred in calendar year 2010 but increased tax receipts in fiscal year 2011.

Receipts from the Federal Reserve. The Federal Reserve System remits most of the profits from its portfolio of investments and other activities to the Treasury; those remittances appear in the federal budget as revenues. The Federal Reserve's portfolio has grown significantly as a result of its recent approach to conducting monetary policy; receipts from the Federal Reserve will increase in 2011 by roughly \$10 billion, to \$86 billion, CBO estimates.

Outlays in 2011

Outlays are expected to total \$3.6 trillion this year, or nearly 24 percent of GDP—well above the annual average of 21 percent of GDP over the past 40 years. Of the estimated \$141 billion increase in outlays from 2010 to 2011, about half is attributable to a smaller downward revision in the estimated net budgetary impact of the TARP this year than last year, as explained below. Excluding the TARP, total outlays are projected to grow by \$71 billion, or about 2 percent, in 2011.

Outlays stemming from ARRA peaked at \$235 billion in 2010 but will fall to \$152 billion in 2011, CBO estimates, a drop of \$83 billion. That drop is driven primarily by declines in ARRA-related spending on unemployment compensation and Medicaid (although subsequent legislation continued additional federal funding for both programs). In the years after 2011, outlays from ARRA are projected to continue to decline, totaling \$58 billion in 2012, \$33 billion in 2013, and \$17 billion in 2014.

Mandatory Spending. Outlays for mandatory programs (which are governed by statutory criteria and are not controlled by the annual appropriation process) are projected to rise by \$110 billion, or 5.7 percent, this year. That increase represents a change of direction from last year (when mandatory outlays fell by 8.6 percent), but this year's increase is smaller than the 8.8 percent average annual rate of growth between 2000 and 2009.

A difference in adjustments to the estimated costs of the TARP accounts for the largest change in mandatory

spending in 2011. Because the nation's financial system stabilized and many institutions repaid funds provided by the TARP earlier than originally expected, the initial costs recorded for the TARP in 2009 proved too high. As a result, in 2010 the Administration reduced the previously recorded cost by \$115 billion and, following the standard procedures for federal credit programs, that adjustment was recorded as a negative outlay in 2010.⁴ (Also included in last year's outlays was \$5 billion in additional costs for new activities.) In 2011, CBO estimates, further adjustments to the projected cost of the program will again reduce the deficit—leading to negative outlays for the program of \$39 billion.⁵ That smaller negative outlay this year accounts for \$70 billion of the projected increase in mandatory spending. All other mandatory spending is expected to rise by a total of \$39 billion, or less than 2 percent.

Outlays for Social Security will rise by \$25 billion, or 3.5 percent, in 2011, CBO estimates. That growth rate is about the same as last year's and below the average annual increase of the previous 10 years, mainly because there was no cost-of-living adjustment in January 2011.

Outlays for Medicare (excluding receipts of Medicare premiums and certain other offsetting receipts) are expected to grow by \$35 billion, or 6.7 percent, this year. If not for a shift in the timing of some payments to health care providers from 2012 into 2011 (because October 1 falls on a weekend this year), the growth rate would be 3.8 percent. That growth rate is significantly below the annual average of 9.1 percent for the past decade, which was boosted substantially by the establishment of Medicare's Part D prescription drug program. The unusually slow growth in 2011 can be attributed, at least in part, to

4. In keeping with procedures specified in law, the TARP's outlays are recorded as the estimated present value of all cash flows for the program, with an adjustment for market risk (risk that investors cannot protect themselves against by diversifying their portfolios). Present value is a single number that expresses a flow of current and future income or payments in terms of an equivalent lump sum received or paid today. For an analysis of the budgetary effects of the transactions made under the authority of the TARP, see Congressional Budget Office, *Report on the Troubled Asset Relief Program—March 2011* (March 2011).

5. Under standard accounting for credit programs in the federal budget, the original subsidy calculation may be increased or decreased by a "credit subsidy reestimate" in subsequent years, based on updated valuations of the present-value costs of the cash flows associated with those credit programs.

limitations on payment rates for certain types of providers. Also at work could be changes in the use of health care services related to weak economic conditions, but whether such changes have occurred is not clear at this point.

Federal outlays for Medicaid will rise by \$2 billion, or by less than 1 percent, this year, CBO estimates. That slight growth contrasts with an 8.7 percent increase in 2010 and an average annual increase of 8.8 percent between 2000 and 2009; the slowdown this year results from the expiration of provisions in ARRA that boosted federal assistance to states for Medicaid in 2009 and 2010. Those provisions expired in December 2010, and subsequent legislation that continued additional federal assistance at a lower rate than was provided under ARRA expired in June 2011.

Outlays for deposit insurance are the difference between the costs to the government of dealing with failed financial institutions and the receipts that come in the form of premiums paid by financial institutions. In 2010, the budget recorded \$32 billion in negative outlays for deposit insurance; in 2011, CBO estimates, the program will record negative outlays of \$6 billion. That \$26 billion change (which increases the deficit) occurs because the Federal Deposit Insurance Corporation required insured institutions to prepay premiums in 2010 that otherwise would have been due in calendar years 2011, 2012, and 2013. Those prepayments reduced the deficit in 2010; they are not anticipated to recur in 2011.

Spending for several other programs is expected to decline in 2011. Outlays for unemployment compensation—which soared in 2009 and 2010 because of the recession and because of legislation that enhanced benefits—began falling in 2011, although such spending remains high by historical standards. Spending for unemployment benefits is anticipated to total \$120 billion this year, nearly \$40 billion below its peak in 2010. Outlays have fallen primarily because of a decline in the number of people receiving first-time payments of regular unemployment benefits.

Outlays for Fannie Mae and Freddie Mac will fall by \$35 billion, CBO estimates, from \$40 billion in 2010 to \$5 billion in 2011, mostly because the two entities are expected to recognize fewer losses on their mortgage investments and guarantees.⁶

Outlays for higher education programs will fall by \$18 billion this year, CBO estimates. That change is the net result of a \$32 billion decrease in outlays recorded for student loans—primarily because of revisions to the estimated costs of loans made in previous years—along with a \$13 billion increase in anticipated outlays for the Pell Grant program.

Spending for all other mandatory programs will increase, on net, by nearly \$44 billion in 2011, CBO estimates. Outlays for veterans' programs, primarily disability compensation and pension benefits, account for \$13 billion of that increase; and the Treasury's program to purchase mortgage-backed securities, which ended in 2010, will add another \$12 billion to the deficit, mostly because of revisions to the estimated earnings on those previous purchases. All other mandatory spending is anticipated to rise by \$20 billion.

Discretionary Spending. CBO anticipates that outlays from annual appropriations will total \$1.35 trillion in 2011, \$6 billion (0.5 percent) more than last year. The increase in discretionary outlays is the smallest since 1996, and it reflects a relatively small rise in spending for defense that is partially offset by a drop in nondefense outlays.

Defense outlays are expected to increase by \$14 billion, or 2.0 percent, in 2011—well below both the 4.9 percent increase last year and the 9.1 percent average annual growth rate for the period from 2000 through 2009.

6. CBO views Fannie Mae and Freddie Mac as part of the federal government. Thus in keeping with procedures that apply to the government's credit programs, CBO's baseline projections generally show the estimated subsidy costs associated with new credit assistance that those entities are expected to provide. The Administration, in contrast, treats Fannie Mae and Freddie Mac as non-governmental, and it records as outlays the net payments the Treasury makes to the two entities. In presenting 2011 outlays in this report, CBO has followed the Administration's procedures because doing so allows CBO to provide both the best estimate of what will be recorded in the budget for the year and a figure that can be compared with the outlays that were recorded for 2010. For future years, CBO's baseline projections continue to show the estimated subsidy costs associated with new credit assistance provided by the two entities. For further information on the budgetary cost of Fannie Mae and Freddie Mac, see Statement of Deborah Lucas, Assistant Director for Financial Analysis, Congressional Budget Office, before the House Committee on the Budget, *The Budgetary Cost of Fannie Mae and Freddie Mac and Options for the Future Federal Role in the Secondary Mortgage Market* (June 2, 2011).

Spending for operations and maintenance and for military personnel will increase by \$13 billion and \$6 billion, respectively, CBO estimates; those increases will be partially offset by decreases in outlays for research and development and for procurement.⁷ In total, CBO estimates that defense outlays will reach \$703 billion this year, or 4.7 percent of GDP, equal to the share in the previous two years. Those amounts include outlays for military operations in Afghanistan and Iraq, which will total \$160 billion in 2011, CBO estimates, slightly less than was spent for such purposes last year. (Spending for diplomatic operations and foreign aid specifically related to those operations accounted for an additional roughly \$5 billion in both 2010 and 2011.)⁸

Nondefense discretionary outlays are expected to fall by nearly \$8 billion (1 percent) this year, to \$650 billion, following growth of 13.3 percent last year and average annual increases of 6.9 percent between 2000 and 2009. Such spending will equal about 4.3 percent of GDP in 2011, slightly below last year's figure, which was the highest share in more than 25 years (in part because of outlays from funding that was provided in 2009 in ARRA). Nondefense discretionary outlays from ARRA funding will drop by almost \$18 billion in 2011, CBO estimates, primarily as a result of decreases for the State Fiscal Stabilization Fund (\$9 billion) and student financial assistance (\$8 billion). That decline will be partially offset by increases in outlays that are unrelated to ARRA, including spending on veterans' benefits (\$5 billion, mostly for health care) and assistance for international development and humanitarian aid (\$3 billion).

Net Interest. Outlays for the budget category "net interest"—which consists of the government's interest payments on debt held by the public offset by interest income the government receives—will rise to \$221 billion this year from \$196 billion last year, CBO estimates. Much of that increase results from higher inflation this year, which has boosted the cost of the Treasury's

inflation-protected securities, and from the steep rise in government debt.

CBO's Baseline Budget Projections for 2012 to 2021

If various provisions of the 2010 tax act expire as scheduled, the provisions of the Budget Control Act are fully implemented, and other laws affecting spending and revenues also remain unchanged, the budget deficit will drop sharply over the next three years, from 8.5 percent of GDP this year to 6.2 percent in 2012, 3.2 percent in 2013, and 1.6 percent in 2014, CBO projects. Three main factors account for the reduction:

- The scheduled expiration of several tax provisions and a gradually improving economy are projected to boost revenues as a share of GDP by almost 5 percentage points between 2011 and 2014.
- The continued waning of outlays resulting from ARRA and spending for unemployment compensation and other benefits that tend to rise during recessions, along with the newly imposed caps on discretionary spending, are projected to reduce outlays as a share of GDP by 1.7 percentage points between 2011 and 2014.
- Savings resulting from legislation produced by the deficit reduction committee or, if the Congress fails to enact such legislation, through the automatic spending cuts that will then be triggered, are projected to reduce deficits relative to GDP by a little more than half a percentage point beginning in 2013.

CBO's baseline projections of deficits and debt over the 2012–2021 period incorporate \$1.2 trillion in deficit reduction that is expected to result from provisions of the Budget Control Act related to the deficit reduction committee (see Box 1-1 on page 6). However, the projections of revenues and outlays presented here do not include the effect of those provisions because it is unclear what specific changes in policy will ultimately achieve the intended amount of deficit reduction. If automatic cuts are implemented, they will apply only to spending, but legislation originating with the deficit reduction committee, if enacted, also could affect revenues. CBO has no basis for allocating the deficit reduction between those two components of the budget.

7. Because October 1 falls on a weekend this year, salary payments to service members that otherwise would have been made in fiscal year 2012 will be shifted into 2011. Excluding the effect of that shift, outlays for military personnel would increase by about \$2 billion, CBO estimates.

8. For more details about funding for operations in Afghanistan and Iraq and related activities, see Congressional Budget Office, *Budget and Economic Outlook: Fiscal Years 2011 to 2021* (January 2011), Box 3-2, pp. 76–77.

Under current law, annual deficits will stabilize as a share of GDP after 2014, fluctuating in a narrow range between 1.0 percent and 1.5 percent over the period from 2015 through 2021, CBO projects. Both revenues and outlays (excluding the effects of provisions in the Budget Control Act related to the deficit reduction committee) are projected to rise relative to GDP during those years. The caps imposed by the Budget Control Act will cause discretionary spending to decline from 9.0 percent of GDP in 2011 to 6.1 percent in 2021. However, that decline is more than offset, in CBO's projections, by increases relative to GDP in both mandatory spending and net interest payments.

Even with declining deficits, debt held by the public would continue to grow in the near term relative to the size of the economy—from 67 percent of GDP this year to a peak of 73 percent by the end of 2013. After that, debt held by the public would gradually fall to 61 percent of GDP by 2021, an amount well above the annual average of 37 percent recorded over the past 40 years.

That substantial debt, coupled with rising interest rates, is projected to cause the government's annual net spending for interest to nearly double as a percentage of GDP between 2011 and 2021. Interest costs are projected to rise from 1.5 percent of GDP in 2011 to 2.8 percent of GDP in 2021 excluding the effect of savings related to the deficit reduction committee, or to 2.6 percent including those savings.

Revenues in the 2012–2021 Period

Under the current-law assumptions that underlie CBO's baseline, total revenues are projected to climb sharply in the next few years, from 15.3 percent of GDP in 2011 to 16.8 percent in 2012 and 20.2 percent in 2014. Much of the increase through 2014 is attributable to the expiration of tax provisions enacted since 2001 and, to a lesser extent, to other scheduled changes in tax rules. In addition, certain structural features of the individual income tax will cause receipts to rise gradually over the next 10 years, and factors related to the economic recovery (such as anticipated rebounds in wages and salaries and in realizations of capital gains that are expected to outstrip projected growth in GDP) are projected to increase revenues further relative to GDP. Together, all of those forces push federal revenues in CBO's baseline to 20.9 percent of GDP by 2021 (excluding any changes arising from provisions of the Budget Control Act related to the deficit

reduction committee). Over the past 40 years, federal revenues have averaged 18.0 percent of GDP.

Individual Income Taxes. CBO projects that, under current law, individual income tax receipts will rise from 7.2 percent of GDP this year to 11.2 percent in 2021 (from \$1.1 trillion to about \$2.7 trillion). In addition to the scheduled changes in tax law and the features of the existing tax system that cause revenues to rise faster than income over time, that projected increase in receipts reflects an expected rebound in taxable income and some other effects of the economic recovery.

Scheduled Changes in Tax Law. Certain tax provisions enacted since 2001 and most recently extended in the 2010 tax act are now scheduled to expire at the end of December 2012, returning many parts of the current income tax to rules that were in effect more than a decade ago. For example, statutory tax rates on ordinary income, capital gains, and dividends will increase; the 15 percent tax bracket for people who file joint returns will narrow; and the child tax credit will be smaller. In addition, higher exemption amounts that temporarily mitigate the impact of the AMT will expire at the end of December 2011. CBO projects that, in the absence of new legislation, the resulting increase in tax liabilities stemming from the AMT in 2012 will be paid almost entirely in 2013, pushing up receipts that year, and greater liabilities stemming from both the AMT and the expiration of the earlier tax cuts will raise receipts throughout the coming decade. In addition, tax provisions enacted in the 2010 health care legislation are scheduled to take effect in the coming years, with the most significant impacts starting in 2013.⁹ Together, those scheduled changes in tax law will have the effect of boosting income tax receipts as a share of GDP by roughly 1.8 percentage points between now and 2021, CBO projects.

9. CBO projects that provisions of the Patient Protection and Affordable Care Act (P.L. 111-148) and the Health Care and Education Reconciliation Act of 2010 (P.L. 111-152) will increase individual income tax receipts, on net, by about 0.1 percent of GDP by 2021. Most significantly, a new tax on the unearned income of taxpayers with relatively high incomes and a reduction in employers' spending for employment-based health insurance (which will result in higher taxable incomes) will increase revenues. Those increases will be partly offset by revenue reductions from the new credits that will be available to certain households to purchase health insurance through exchanges.

Real Bracket Creep. Even if there were no changes in statutory rates or credits, various features of the individual income tax would cause average tax rates to rise over time. For example, income tax brackets and exemptions are indexed for inflation but not for growth in real income. As a result, as real income grows, more income will be taxed in higher brackets. CBO projects that this phenomenon, known as real bracket creep, will raise receipts relative to GDP by about 0.9 percentage points over the next 10 years. Moreover, as nominal income rises, the AMT will apply to a growing share of income.¹⁰ CBO estimates that without changes in law, the AMT will increase tax revenues as a share of GDP by about 0.3 percentage points between now and 2021.

Taxable Retirement Income. Taxable distributions from tax-deferred retirement accounts, such as individual retirement accounts and 401(k) plans, are expected to grow more rapidly than other income as the population ages. By CBO's estimate, taxation of such income will cause revenues as a share of GDP to rise by about 0.3 percentage points over the next decade.

Economic Recovery and Other Factors. Other factors, largely related to the projected economic recovery, are expected to raise revenues as a share of GDP by about 0.6 percentage points between now and 2021. Certain components of taxable income—including wages and salaries, interest, capital gains distributions, and proprietors' income—fell relative to GDP over the past several years. CBO expects that, as the economy recovers, such income will rebound more quickly than the economy as a whole, boosting revenues relative to GDP.

Social Insurance Taxes. Receipts from social insurance taxes are projected to grow from 5.4 percent of GDP this year to 6.2 percent in 2013 and to remain at about that level thereafter. The largest contributor to growth in

social insurance taxes is the expiration of the payroll tax cut in effect for calendar year 2011. The 2010 tax act temporarily reduced the employee's share of the payroll tax by 2 percentage points (from 6.2 percent of wages to 4.2 percent), reducing receipts in fiscal years 2011 and 2012; its expiration will boost receipts as a share of GDP by 0.6 percentage points between 2011 and 2013. The remaining growth over the next two years comes largely from a projected increase in wages and salaries as a share of GDP and from the additional Hospital Insurance (Medicare Part A) payroll tax that was instituted by the health care legislation enacted in 2010 and is scheduled to take effect in January 2013.

Corporate Income Taxes. CBO estimates that corporate income tax receipts will nearly double as a percentage of GDP in the next three years—from 1.3 percent this year to 2.5 percent in 2014. Domestic economic profits are projected to decline slightly, relative to the economy, over the 2012–2014 period, reducing corporate receipts as a share of GDP by less than 0.1 percentage points. Nevertheless, several factors are expected to push up receipts:

- Over the past several years, changes to the tax code have lowered the average tax rate on domestic economic profits. The most significant changes involve the speed with which businesses can deduct equipment purchases from their taxable income. Under current law, companies can expense (fully deduct from taxable income) all qualified investments in equipment made in late 2010 and throughout 2011, rather than spreading those deductions over several years, as was required before the change. In 2012, businesses can expense half of their investments in equipment; after that, deductions must be spread out over a longer period.¹¹ The expiration of the expensing provisions and the return to the typical rules after 2012, along with smaller effects from other expiring tax provisions, such as the research and experimentation tax credit, are expected to increase corporate income tax receipts as a share of GDP by about 0.8 percentage points by 2014.

10. As with the regular income tax, the effective tax rates under the AMT increase as rising real income pushes taxpayers into higher tax brackets. Unlike the regular income tax, however, the AMT's tax brackets and exemption amounts are not indexed for inflation. Therefore, as income grows with the overall price level over time, more taxpayers become subject to the AMT, and taxpayers who are already subject to the AMT tend to have a larger share of their income subject to it. See Congressional Budget Office, *The Individual Alternative Minimum Tax*, Issue Brief (January 2010).

11. Current law, however, will continue to permit businesses with relatively small investments in equipment to fully deduct those costs in the year the equipment is placed in service.

- Other legislation has shifted some corporate tax payments from years after 2014 into that year, causing projected receipts in 2014 to be about 0.2 percentage points higher as a share of GDP than they would be otherwise.
- Corporate income tax receipts remain below the amount that can be explained by currently available data on profits. CBO expects that the factors generating that disparity will gradually disappear and that corporate income tax receipts will rise to more closely match their historical relationship to profits, increasing projected revenues relative to GDP by about 0.3 percentage points, all between 2011 and 2014.

Between 2014 and 2021, corporate income tax receipts are projected to decline by 0.7 percentage points as a share of the economy, reducing corporate receipts to 1.9 percent of GDP in 2021—close to the annual average of 2.0 percent seen over the past 40 years. Profits are expected to decline relative to GDP as higher interest rates increase U.S. businesses' interest payments and as labor income rises as a percentage of GDP. In addition, the unwinding of shifts in corporate tax payments into 2014 and other effects of legislation further reduce corporate receipts over the period.

Between 2011 and 2021, corporate income tax receipts are projected to increase as a share of GDP by 0.6 percentage points.

Receipts from Other Sources. In addition to individual income, corporate income, and social insurance taxes, the federal government collects revenues from excise taxes, estate and gift taxes, earnings of the Federal Reserve System, customs duties, and other miscellaneous levies. CBO projects that revenues from those sources will rise slightly, from 1.4 percent of GDP this year to 1.5 percent in 2021. For this group of sources, falling receipts from the Federal Reserve, CBO estimates, will be more than offset over the period by rising receipts from the other sources.

Outlays in the 2012–2021 Period

In CBO's baseline projections, federal outlays total \$3.6 trillion in 2012, about \$11 billion (0.3 percent) more than anticipated for this year. That slow rate of growth—outlays increased by an average of about 7 percent per year over the past decade—is largely the result of a drop in spending from ARRA and in payments for

unemployment compensation and other benefits that tend to rise during periods of economic weakness. In addition, because October 1, 2011, falls on a weekend, some benefit payments will shift from fiscal year 2012 into 2011.

Excluding any changes to spending that could result from provisions of the Budget Control Act related to the deficit reduction committee, total outlays in CBO's baseline equal 23.0 percent of GDP in 2012, decline to 22.0 percent of GDP by 2015, and then gradually rise to 22.7 percent by 2021. Mandatory spending and interest costs rise, on balance, relative to GDP, and discretionary outlays fall, reflecting the restraining effect of the statutory caps put in place by the Budget Control Act. From 2012 through 2021, outlays in CBO's baseline average 22.4 percent of GDP—higher than the annual average of 20.8 percent recorded over the past 40 years. That difference arises from two factors: mandatory spending that is much higher than average and discretionary spending that is projected to be much lower than its 40-year average relative to GDP.

Mandatory Spending. Under CBO's baseline projections, mandatory outlays (net of offsetting receipts) range between 12.9 percent and 13.8 percent of GDP through 2021—well above the ratio of such spending to GDP for most of the past several decades.¹² From 1979 through 2008, mandatory spending ranged between 8.9 percent and 11.1 percent of GDP. In 2009, however, that spending surged to 14.8 percent of GDP, driven by the financial crisis, the recession, and the policies implemented in response to them. Mandatory spending dropped back to 13.2 percent of GDP in 2010, in large part because of the adjustment to the estimated cost of the TARP described previously. For the next several years, CBO projects, decreases in outlays from ARRA, for unemployment compensation, and for refundable tax credits will largely offset increases in other mandatory programs, primarily those related to health care and retirement. As a result, mandatory outlays will change little as a percentage of GDP. In the last few years of the projection period, rising spending on those health care and retirement programs

12. Offsetting receipts are certain payments made to the federal government by citizens or businesses and certain payments made by federal agencies to other federal agencies. The largest components are Medicare premium payments and the receipts of payments from agencies to cover the government's share of federal employees' retirement benefits.

will cause mandatory outlays to increase again at a faster rate than the economy.

Three programs—Social Security, Medicare, and Medicaid—account for the bulk of the government’s mandatory spending. Outlays for Social Security will grow at an average annual rate of almost 6 percent over the 2012–2021 period, CBO projects. By 2021, spending for Social Security benefits will total \$1.3 trillion (5.4 percent of GDP), up from \$769 billion (4.9 percent of GDP) in 2012 (see Table 1-4 on page 18). That growth in nominal outlays reflects an increase in the projected number of beneficiaries from 56 million in 2012 to 71 million in 2021, along with the increased average benefit amounts that result from inflation and real wage growth over the period.

CBO estimates that outlays for Medicare (excluding receipts from premiums) will total \$555 billion (3.5 percent of GDP) in 2012, about the same, in nominal terms, that it estimates for 2011. Between 2013 and 2021, outlays are projected to grow at an average annual rate of 6.3 percent, reaching \$966 billion (4.1 percent of GDP) in 2021. Spending will be pushed up over the decade by increases in the number of beneficiaries and in health care costs per beneficiary (in nominal terms). At the same time, growth in spending will be restrained by reductions in updates to payment rates that were included in the 2010 health care legislation and by the program’s sustainable growth rate mechanism, which, under current law, is projected to reduce payments to physicians by about 30 percent in 2012 and by additional amounts thereafter.

CBO projects that federal outlays for Medicaid will decrease by 5.5 percent in 2012, mostly because the enhanced matching rates under ARRA and the lower enhanced rates provided by subsequent legislation have expired and because anticipated economic growth will lead to slow growth in enrollment.¹³ Over the rest of the decade, however, Medicaid outlays are projected to rise at an average annual rate of 9.0 percent because of

demographic changes and a sharp increase in enrollment beginning in 2014 stemming from the 2010 health care legislation, which also increased the average federal share of the program’s costs. (CBO estimates that the legislation will boost Medicaid enrollment by about 17 million people by 2021.) Federal spending on Medicaid is projected to reach \$561 billion (2.4 percent of GDP) in 2021, compared with \$259 billion (1.7 percent of GDP) in 2012.

Beginning in 2014, subsidies for health insurance will become available for individuals and families who meet income and other eligibility criteria.¹⁴ In total, outlays for those subsidies, for establishing and operating exchanges to facilitate the purchase of health insurance, and for running related programs will increase from \$1 billion in 2012 to \$96 billion in 2021, CBO estimates.

As the labor market gradually improves and emergency unemployment benefits expire, spending for unemployment compensation will decline from \$77 billion in 2012 to \$51 billion in 2016, CBO estimates. Spending is expected to increase in the remaining years of the projection period, in step with projected growth in wages and the labor force. By 2021, CBO estimates, outlays for unemployment benefits will rise again to \$60 billion.

Outlays for the earned income and child tax credits are projected to decline considerably from 2013 to 2014 (from \$79 billion to \$47 billion) for two reasons: Under current law, the maximum amount of the child tax credit will be reduced from \$1,000 to \$500, and the expiration of various tax cuts at the end of 2012 will boost tax liability for many filers (which means that, in relative terms, more of the impact of the child tax credit will be reflected as a reduction in revenues rather than as an increase in outlays). After 2014, annual outlays for the two credits will remain near \$45 billion.

Net outlays for deposit insurance are projected to decline over the period as the Federal Deposit Insurance Corporation and the National Credit Union Administration collect additional insurance premiums to offset losses incurred; the failure rate among financial institutions also

13. Medicaid is a joint federal and state program in which the federal government shares costs with states for approved services. The proportion of costs paid by the federal government varies from state to state but typically has averaged 57 percent. (Provisions of ARRA and subsequent legislation temporarily increased the federal share, most recently through June 2011.) The health care legislation enacted in March 2010 provides that, beginning in 2014, the federal matching rate will average between approximately 60 percent and 62 percent.

14. The subsidies for health insurance premiums are structured as refundable tax credits; the portions of such credits that exceed taxpayers’ liabilities are classified as outlays, and the portions that reduce tax payments appear in the budget as reductions in revenues.

is expected to decline. CBO estimates that net outlays for deposit insurance in 2012 and 2013 will be \$4 billion and \$3 billion, respectively. Between 2014 and 2021, the budget is projected to show net receipts (recorded as negative outlays) averaging about \$13 billion per year from the government's deposit insurance activities as the economy improves and as income from premiums more than offsets the losses on deposits associated with bank failures. In total, the government will receive \$100 billion over the coming decade in net collections from its deposit insurance programs, CBO estimates.

Outlays for all other mandatory programs are projected to rise from \$513 billion in 2012 to \$604 billion in 2021. That increase is more than offset by a projected increase in offsetting receipts, which grow from \$203 billion in 2012 to \$317 billion in 2021, CBO projects.

Discretionary Spending. CBO's baseline for discretionary funding incorporates the caps placed on such budget authority for 2012 through 2021 by the Budget Control Act.¹⁵ Discretionary budget authority subject to the caps will be limited to \$1.043 trillion in 2012 and \$1.047 trillion in 2013, and growth will be restricted to about 2 percent per year after that, with discretionary budget authority reaching a maximum of \$1.234 trillion in 2021. Those caps do not constrain appropriations for the wars in Afghanistan and Iraq or for similar activities (sometimes known as overseas contingency operations) nor do they apply to certain other types of spending.¹⁶ In projecting funding for overseas contingency operations, CBO followed long-standing procedures governing baseline projections by assuming that appropriations would equal the funding provided for 2011 with adjustments for inflation. With those amounts included, total budget authority for discretionary programs would rise from \$1.20 trillion in 2012 to \$1.43 trillion in 2021 (see Table 1-5 on page 20).

Appropriations of those amounts will mean reductions in the real resources available for the government's pro-

grams. If discretionary budget authority was allowed to grow at the rate of inflation, without the constraint on nonwar funding imposed by the caps, such authority would be about 4 percent higher in 2012 and 8 percent higher in 2021 (see Figure 1-2 on page 21).

Even with such adjustments for inflation, however, appropriations could be insufficient to continue current policies over the 2012–2021 period. For example, the cost of veterans' health benefits—assuming current enrollment rules remain unchanged—is projected to rise more rapidly than inflation and thus to exceed the budget authority calculated simply by extrapolating the current year's appropriations at the projected rate of inflation.¹⁷ Similarly, maintaining current award amounts for Pell grants would require funding above what would be shown in a projection based on inflating 2011 appropriations. Moreover, if budget authority for defense programs grew at the rate of inflation, that amount of funding would be insufficient to pay for the Future Years Defense Program put forward in February 2011 by the Department of Defense. CBO has examined the programs and plans contained in that document and projected their budgetary impact.¹⁸ According to CBO's calculations, over the period from 2012 to 2021, defense funding that would be needed to implement that plan would exceed by about \$480 billion the amounts projected by assuming that current budget authority increased at the rate of inflation.

Projected Outlays. Total discretionary outlays in CBO's baseline are projected to decline in 2012 and 2013, and to grow slowly thereafter, exhibiting an average annual increase of 1.2 percent from 2013 through 2021—less than the 1.8 percent rate of growth that would be projected if all discretionary appropriations grew at the rate of inflation. (Such outlays increased by 8.9 percent in 2010, and by an annual average of 8.0 percent between 2000 and 2009.) As a result, in CBO's baseline, discretionary outlays decline from 9.0 percent of GDP in 2011 to 6.1 percent of GDP in 2021, a share of the total economy roughly equal to that for discretionary outlays from 1998 through 2001 but well below the 8.7 percent average over the past 40 years.

15. Budget authority refers to the authority provided by law to incur financial obligations, which eventually result in outlays.

16. The caps may be adjusted upward to allow additional spending for activities in Afghanistan and Iraq and for similar activities as well as for "program integrity" initiatives that identify and reduce overpayments in certain benefit programs. The caps also can be adjusted each fiscal year to account for some funding designated for emergencies and for disaster relief.

17. See Congressional Budget Office, *Potential Costs of Veterans' Health Care* (October 2010).

18. See Congressional Budget Office, *Long-Term Implications of the 2012 Future Years Defense Program* (June 2011).

Table 1-4.**CBO's Baseline Projections of Mandatory Spending**

(Outlays, in billions of dollars)

	Actual,												Total	
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2012-2016	2012-2021
Social Security	701	726	769	812	853	897	945	1,001	1,063	1,131	1,203	1,276	4,276	9,951
Health Care Programs														
Medicare ^a	520	555	555	598	632	662	718	746	777	845	903	966	3,164	7,401
Medicaid	273	274	259	276	325	364	404	430	455	486	520	561	1,628	4,081
Health insurance subsidies, exchanges, and related spending	*	*	1	1	16	35	56	70	79	85	90	96	108	529
MERHCF	8	9	9	10	10	11	12	13	13	14	15	16	51	123
Children's Health Insurance Program	8	9	9	9	9	10	10	8	6	6	6	6	46	78
Other	1	5	8	7	14	27	24	26	26	31	35	38	80	236
Subtotal	810	852	841	901	1,005	1,108	1,223	1,294	1,357	1,466	1,569	1,684	5,078	12,448
Income Security														
SNAP	70	77	80	80	75	73	72	71	69	68	67	66	380	720
Unemployment compensation	159	120	77	60	62	58	51	52	53	55	58	60	309	587
Supplemental Security Income	47	53	47	53	54	55	62	58	54	61	63	64	271	571
Earned income and child tax credits	77	78	79	79	47	46	44	44	44	45	45	46	295	519
Family support ^b	28	27	25	25	25	25	25	25	25	25	25	25	125	250
Child nutrition	17	18	19	21	21	22	23	24	26	27	28	29	107	241
Foster care	7	7	7	7	8	8	8	8	9	9	9	10	37	82
Making Work Pay and other tax credits ^c	32	24	5	5	*	*	*	*	*	*	*	*	10	10
Subtotal	437	404	340	331	292	287	285	282	280	289	295	301	1,535	2,981
Federal Civilian and Military Retirement														
Civilian ^d	82	83	87	90	92	95	98	101	104	108	112	115	461	1,001
Military	51	55	49	54	55	56	61	58	55	61	63	65	274	577
Other	6	6	7	7	8	8	9	9	10	10	11	11	40	92
Subtotal	138	144	143	151	155	159	168	168	169	180	185	192	775	1,670
Veterans ^e														
Income security	49	59	60	59	60	61	67	64	60	67	68	69	307	634
Other	9	12	11	12	13	13	14	14	15	16	17	18	63	143
Subtotal	58	71	71	71	73	74	81	78	75	82	85	87	370	777
Other Programs														
TARP	-110	-39	16	3	2	1	1	*	*	*	*	*	22	23
Fannie Mae and Freddie Mac ^f	40	5	7	6	4	4	4	4	5	5	6	6	26	51
Deposit insurance	-32	-6	4	3	-10	-12	-14	-17	-20	-11	-11	-12	-30	-100
Higher education	-12	-30	-4	-8	-8	-8	-3	2	5	5	5	4	-31	-10
Agriculture	15	15	13	19	16	15	15	15	15	15	16	16	78	155
Other	50	73	60	55	53	51	51	49	49	48	46	46	270	506
Subtotal	-49	17	96	77	56	52	54	54	54	62	61	60	335	626

Continued

Table 1-4.

Continued

CBO's Baseline Projections of Mandatory Spending

(Outlays, in billions of dollars)

	Actual,												Total	
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2012-2016	2012-2021
Offsetting Receipts														
Medicare ^a	-74	-79	-84	-86	-90	-97	-105	-114	-123	-132	-138	-148	-461	-1,116
Federal share of federal employees' retirement	-61	-64	-65	-65	-67	-70	-73	-76	-80	-84	-87	-90	-341	-758
Other	-48	-48	-55	-62	-65	-70	-69	-72	-75	-77	-77	-79	-320	-700
Subtotal	-183	-191	-203	-213	-222	-237	-247	-261	-277	-293	-302	-317	-1,122	-2,573
Total Mandatory Spending	1,913	2,023	2,056	2,129	2,211	2,340	2,511	2,616	2,721	2,918	3,095	3,282	11,247	25,879
Memorandum:														
Mandatory Spending Excluding														
Offsetting Receipts	2,096	2,213	2,259	2,342	2,434	2,577	2,758	2,877	2,998	3,211	3,398	3,599	12,369	28,452
Medicare Spending Net of Offsetting Receipts	446	477	471	512	542	565	613	633	654	713	765	818	2,703	6,285

Source: Congressional Budget Office.

Notes: Projections over the 2012–2021 period do not include the effect of any potential changes that may occur as a result of provisions related to the Joint Select Committee on Deficit Reduction, created by the Budget Control Act of 2011 (Public Law 112-25).

Data on spending for benefit programs in this table generally exclude administrative costs, which are discretionary.

MERHCF = Department of Defense Medicare-Eligible Retiree Health Care Fund (including TRICARE for Life); SNAP = Supplemental Nutrition Assistance Program; TARP = Troubled Asset Relief Program; * = between zero and \$500 million.

- Excludes offsetting receipts (funds collected by government agencies from other government accounts or from the public in businesslike or market-oriented transactions that are recorded as offsets to outlays).
- Includes Temporary Assistance for Needy Families and various programs that involve payments to states for child support enforcement and family support, child care entitlements, and research to benefit children.
- Also includes outlays for the first-time homebuyer credit, the American Opportunity Tax Credit, and other tax credits.
- Includes Civil Service, Foreign Service, Coast Guard, and other smaller retirement programs as well as annuitants' health care benefits.
- Income security includes veterans' compensation, pensions, and life insurance programs. Other benefits are primarily education subsidies.
- The amounts recorded for 2010 and 2011 reflect cash transfers from the Treasury to Fannie Mae and Freddie Mac. The amounts shown for 2012 through 2021 reflect CBO's estimate of the subsidy cost of new loans and guarantees made by those two entities in each year, adjusted for market risk.
- Includes Medicare premiums and amounts paid by states from savings on Medicaid prescription drug costs.

Table 1-5.**CBO's Baseline Projections of Discretionary Spending**

(Billions of dollars)

	Actual,												Total	
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2012-2016	2012-2021
Budget Authority														
Defense ^a	714	712	724	738	753	769	786	806	826	847	869	891	3,769	8,008
Nondefense ^a	550	511	528	538	550	562	576	590	606	622	639	656	2,753	5,867
Reduction to meet the discretionary cap ^b	0	0	-47	-65	-70	-76	-82	-89	-96	-104	-113	-122	-340	-863
Baseline	1,264	1,223	1,204	1,211	1,233	1,255	1,279	1,307	1,336	1,365	1,396	1,425	6,183	13,012
Outlays														
Defense ^a	689	703	708	727	741	756	777	790	804	829	851	872	3,710	7,856
Nondefense ^a	658	650	634	622	621	625	632	643	657	672	689	707	3,134	6,503
Reduction to meet the discretionary cap ^b	0	0	-27	-49	-62	-70	-77	-84	-91	-98	-106	-115	-285	-778
Baseline	1,347	1,353	1,315	1,300	1,301	1,311	1,332	1,350	1,370	1,404	1,434	1,464	6,559	13,580
Memorandum:														
Outlays (Percentage of GDP)														
Defense ^a	4.7	4.7	4.5	4.5	4.4	4.2	4.1	3.9	3.8	3.8	3.7	3.7	4.3	4.0
Nondefense ^a	4.5	4.3	4.0	3.8	3.7	3.4	3.3	3.2	3.1	3.1	3.0	3.0	3.6	3.3
Reduction to meet the discretionary cap ^b	0	0	-0.2	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.5	-0.5	-0.3	-0.4
Baseline	9.3	9.0	8.4	8.0	7.7	7.2	7.0	6.7	6.5	6.4	6.3	6.1	7.6	6.9

Source: Congressional Budget Office.

Notes: Nondefense discretionary outlays are usually higher than budget authority because of spending from the Highway Trust Fund and the Airport and Airway Trust Fund, which is subject to obligation limitations set in appropriation acts. The budget authority for such programs is provided in authorizing legislation and is not considered discretionary.

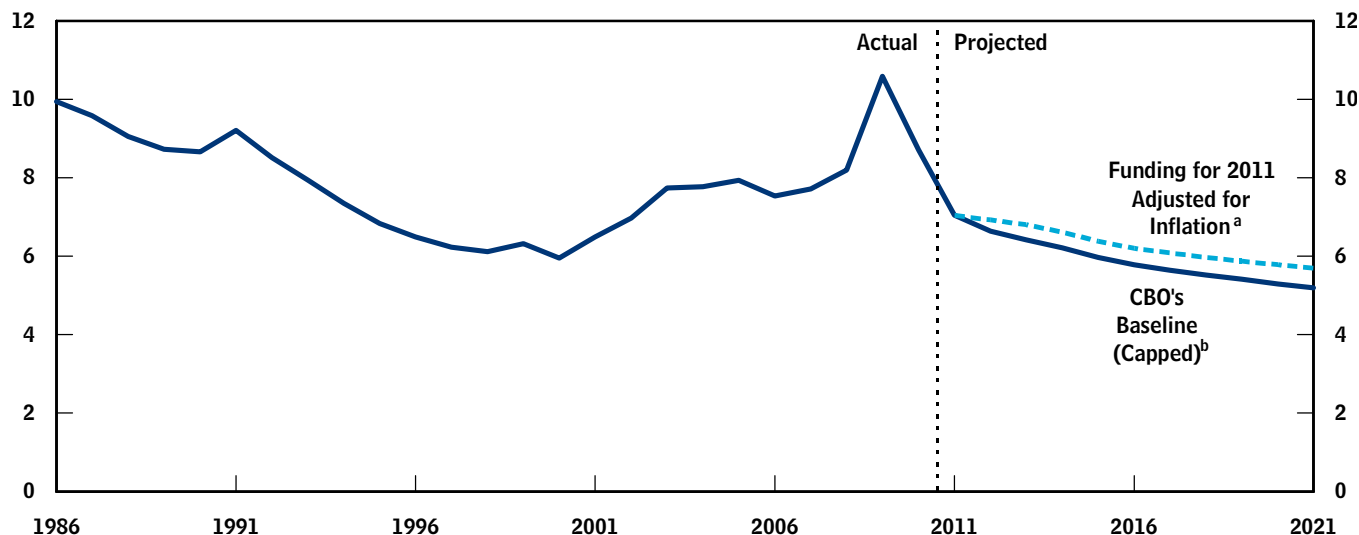
When constructing its baseline, CBO assumes that discretionary appropriations will adhere to the statutory caps recently enacted into law by the Budget Control Act of 2011 (Public Law 112-25). Because the caps do not constrain appropriations for military operations in Afghanistan and Iraq (or for similar activities), CBO's baseline reflects annual appropriations for war-related activities equal to \$159 billion (the amount provided for 2011), adjusted in future years for inflation. The projections for the 2012–2021 period do not include the effect of any potential changes that may occur as a result of adjustments to the caps for reasons allowed under the act or for provisions related to the Joint Select Committee on Deficit Reduction, created by the Budget Control Act.

GDP = gross domestic product.

- These amounts were estimated by assuming that budget authority for fiscal years 2012 to 2021 will be equal to the 2011 appropriation adjusted for inflation.
- These amounts reflect the reductions in budget authority that will be necessary to comply with the discretionary caps, relative to the budget authority that would be provided if appropriations in each year were equal to the 2011 appropriation adjusted for inflation as calculated using CBO's August 2011 economic forecast. Those amounts differ from what is shown in Box 1-1 because that comparison was made relative to CBO's March baseline (adjusted for the effect of full-year appropriations); CBO's August projections incorporate changes to the inflation factors and other adjustments.

Figure 1-2.**Total Discretionary Budget Authority Excluding War Funding**

(Percentage of gross domestic product)



Source: Congressional Budget Office.

- a. Data reflect the assumption that discretionary funding related to federal personnel is inflated using the employment cost index for wages and salaries. All other discretionary funding is adjusted using the gross domestic product price index.
- b. When constructing its baseline, CBO assumes that discretionary funding will adhere to the statutory caps recently enacted into law by the Budget Control Act of 2011 (Public Law 112-25).

CBO's projections do not account for any changes in discretionary outlays that could occur as a result of provisions of the Budget Control Act related to the deficit reduction committee. Future legislation stemming from that committee's actions, or automatic cuts in spending that would be triggered if no such legislation is enacted, could result in additional reductions to discretionary spending.

Illustrative Paths of Discretionary Budget Authority. The Budget Control Act sets separate caps on "security" and "nonsecurity" funding for 2012 and 2013. The act sets overall caps only on total appropriations for 2014 to 2021.¹⁹ The categories specified for 2012 and 2013 do not correspond to the split of spending into defense and

nondefense components that CBO normally reports, and the caps could be met through many combinations of defense and nondefense appropriations.²⁰

To illustrate the potential impact of the discretionary caps, CBO has projected defense and nondefense appropriations under a few different assumptions about how savings would be obtained (as shown in Table 1-6). For example, defense and nondefense appropriations might be cut proportionately, relative to the funding that would be necessary to keep pace with inflation, in order to keep total discretionary funding within the caps. In that case, funding for each category would be about 1 percentage point of GDP lower in 2021 than estimated for this year, a decline of more than one-fourth. Funding for defense purposes in 2021 would represent 2.7 percent of GDP; by comparison, annual funding for defense has

19. For the discretionary caps, the security category comprises discretionary appropriations for the Department of Defense, the Department of Homeland Security, the Department of Veterans Affairs, the National Nuclear Security Administration, the intelligence community management account (95-0401-0-1-054), and all discretionary budget accounts in budget function 150 (international affairs). The nonsecurity category comprises all discretionary appropriations not included in the security category.

20. For the purpose of categorization, defense programs are usually defined as those in budget function 050 (national defense), which includes certain activities of agencies other than the Department of Defense. Some of the activities in those other agencies fall in the "nonsecurity" category for the purpose of enforcing the discretionary caps.

Table 1-6.

Illustrative Paths for Discretionary Budget Authority Subject to the Caps Set in the Budget Control Act of 2011

												Total	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2012- 2016	2012- 2021
In Billions of Dollars													
Defense ^a													
All reductions from defense ^b	552	532	531	516	524	531	541	550	560	569	578	2,634	5,432
Proportional reductions	552	538	541	550	560	571	584	597	610	623	637	2,760	5,811
No reductions from defense	552	562	574	586	599	614	630	646	664	682	700	2,935	6,256
Nondefense													
All reductions from nondefense	511	481	473	480	487	493	501	510	518	526	534	2,414	5,004
Proportional reductions	511	505	506	516	526	536	547	559	572	585	597	2,589	5,449
No reductions from nondefense ^b	511	511	516	550	562	576	590	606	622	639	656	2,715	5,828
Total Budget Authority	1,064	1,043	1,047	1,066	1,086	1,107	1,131	1,156	1,182	1,208	1,234	5,349	11,260
As a Percentage of Gross Domestic Product													
Defense ^a													
All reductions from defense ^b	3.7	3.4	3.3	3.0	2.9	2.8	2.7	2.6	2.6	2.5	2.4	3.1	2.8
Proportional reductions	3.7	3.4	3.3	3.2	3.1	3.0	2.9	2.8	2.8	2.7	2.7	3.2	3.0
No reductions from defense	3.7	3.6	3.5	3.5	3.3	3.2	3.1	3.1	3.0	3.0	2.9	3.4	3.2
Nondefense													
All reductions from nondefense	3.4	3.1	2.9	2.8	2.7	2.6	2.5	2.4	2.4	2.3	2.2	2.8	2.6
Proportional reductions	3.4	3.2	3.1	3.0	2.9	2.8	2.7	2.7	2.6	2.6	2.5	3.0	2.8
No reductions from nondefense ^b	3.4	3.3	3.2	3.2	3.1	3.0	2.9	2.9	2.8	2.8	2.8	3.2	3.0
Total Budget Authority	7.0	6.7	6.5	6.3	6.0	5.8	5.6	5.5	5.4	5.3	5.2	6.2	5.8
Memorandum:													
Discretionary Budget Authority													
Assuming Annual Adjustments for													
Inflation ^c													
In billions of dollars													
Defense ^a	552	562	574	586	599	614	630	646	664	682	700	2,935	6,256
Nondefense	511	528	538	550	562	576	590	606	622	639	656	2,753	5,867
Total Budget Authority	1,064	1,090	1,112	1,136	1,162	1,189	1,220	1,252	1,286	1,321	1,356	5,689	12,123
As a percentage of GDP													
Defense ^a	3.7	3.6	3.5	3.5	3.3	3.2	3.1	3.1	3.0	3.0	2.9	3.4	3.2
Nondefense	3.4	3.4	3.3	3.2	3.1	3.0	2.9	2.9	2.8	2.8	2.8	3.2	3.0
Total Budget Authority	7.0	7.0	6.9	6.7	6.4	6.2	6.1	6.0	5.9	5.8	5.7	6.6	6.2

Source: Congressional Budget Office.

Notes: Budget authority refers to the authority provided by law to incur financial obligations, which eventually result in outlays.

GDP = gross domestic product.

- a. Data exclude funding for operations in Afghanistan and Iraq and for similar activities.
- b. In 2012 and 2013, reductions in defense funding would not be sufficient to meet the caps on nonsecurity funding; therefore, some reductions would have to come from nondefense programs even if all available defense funding classified as nonsecurity was eliminated.
- c. These estimates incorporate the assumption that such budget authority grows at the rate of inflation from its level in 2011.

averaged 4.2 percent of GDP during the past decade. Nondefense funding in 2021 would represent 2.5 percent of GDP; by comparison, such funding has averaged 3.7 percent of GDP during the past decade.

Alternatively, nearly all reductions in appropriations—relative to the funding that would be necessary to keep pace with inflation—that would be necessary to meet the discretionary caps could come from defense activities. In that case, budget authority for defense programs that are not directly related to operations in Afghanistan and Iraq would drop from \$552 billion (3.7 percent of GDP) in 2011 to \$532 billion next year and to \$531 billion in 2013 before beginning to rise again.²¹ By 2021, such funding would total \$578 billion and would equal 2.4 percent of GDP, one-third less than current defense appropriations relative to the projected size of the economy. With that degree of restraint in defense funding, budget authority for nondefense programs could grow at close to the rate of inflation, rising from \$511 billion in 2011 to \$656 billion in 2021. Still, such funding would fall from 3.4 percent of GDP this year to 2.8 percent of GDP 10 years from now.

As another possibility, defense funding could grow at the rate of inflation and all reductions needed to meet the caps could come from nondefense programs. In that case, CBO projects, defense appropriations would total \$700 billion in 2021—still a decline of more than 20 percent as a percentage of GDP compared with funding in 2011—and nondefense appropriations would be \$534 billion, or 2.2 percent of GDP, a drop of more than one-third relative to the projected size of the economy.

Net Interest and Federal Debt

Federal interest costs are largely determined by the stock of government debt and prevailing interest rates. The amount of federal debt held by the public has skyrocketed in the past few years, rising from 40 percent of GDP at the end of 2008 to reach an estimated 67 percent by the end of this year.²² Although interest rates are expected to remain near historic lows in the near term,

net interest outlays are projected to rise by 7 percent in 2012 because of increased federal borrowing.

Interest rates are expected to rise noticeably after the next few years, and under the assumptions that govern CBO's baseline, debt held by the public is projected to reach \$10.2 trillion at the end of this year and to increase to \$14.5 trillion by 2021 (see Table 1-7).²³ As a result, the government's annual net spending for interest is projected to increase from 1.5 percent of GDP in 2012 to 2.8 percent by 2021 excluding the effect of savings related to the deficit reduction committee; including that effect, net interest outlays would equal 2.6 percent of GDP in 2021. In nominal terms, outlays for net interest will increase from \$238 billion to \$613 billion, including \$50 billion in estimated debt-service savings related to the deficit reduction committee.

Budget Projections Under Alternative Scenarios

To illustrate how different decisions by policymakers regarding federal spending programs and the federal tax system would affect future deficits, CBO estimated the budgetary impact of some alternative policies (see Table 1-8 on page 26). The discussion below focuses on the policies' direct effects on revenues and outlays, but the changes also would affect the cost of paying interest on federal debt, which is shown separately in the table and labeled "debt service."

War-Related Discretionary Spending. CBO's projections of discretionary spending for the next 10 years include outlays for operations in Afghanistan and Iraq and other possible overseas contingency operations. The outlays projected in the baseline come from budget authority provided for those purposes in 2010 and earlier years, the \$159 billion in budget authority provided in 2011, and

21. In 2012 and 2013, the total amount of nonsecurity funding that would be available within the defense category if 2011 funding was adjusted for inflation is not large enough—even if all such funding was eliminated—to meet the caps on nonsecurity funding; therefore, to adhere to the caps on nonsecurity funding, some reductions would have to come from nondefense programs.

22. For a more detailed discussion of the growth in federal debt and its possible repercussions, see Congressional Budget Office, *Federal Debt and the Risk of a Fiscal Crisis*, Issue Brief (July 2010).

23. Another measure of federal debt is "debt subject to limit," which is the amount of debt subject to the overall ceiling set in law. (Currently, that ceiling is set at \$14.7 trillion and could increase by between \$1.7 trillion and \$2.0 trillion under procedures spelled out by the Budget Control Act of 2011.) Debt subject to limit includes securities held by federal trust funds and other government accounts. Because it includes those internal government transactions, it is less useful in assessing the impact of government borrowing on financial markets.

Table 1-7.**CBO's Baseline Projections of Federal Debt**

(Billions of dollars)

	Actual, 2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Debt Held by the Public at the Beginning of the Year	7,545	9,019	10,164	11,153	11,773	12,148	12,463	12,840	13,169	13,473	13,820	14,181
Changes to Debt Held by the Public												
Deficit	1,294	1,284	973	510	265	205	278	231	211	259	277	279
Other means of financing	181	-138	16	110	110	110	99	99	94	88	84	82
Total	1,474	1,145	989	620	375	315	377	329	304	347	360	360
Debt Held by the Public at the End of the Year	9,019	10,164	11,153	11,773	12,148	12,463	12,840	13,169	13,473	13,820	14,181	14,541
Memorandum:												
Debt Held by the Public at the End of the Year (Percentage of GDP)	62.1	67.3	71.2	72.8	71.6	68.7	67.2	65.8	64.3	63.1	62.0	61.0
Debt Held by the Public Excluding Financial Assets ^a												
In billions of dollars	8,005	9,306	10,266	10,766	11,027	11,219	11,492	11,714	11,913	12,158	12,421	12,686
As a percentage of GDP	55.2	61.7	65.5	66.5	65.0	61.9	60.1	58.5	56.9	55.5	54.3	53.2
Gross Federal Debt ^b	13,529	14,797	15,927	16,663	17,178	17,679	18,276	18,879	19,475	20,090	20,711	21,346
Debt Subject to Limit ^c	13,511	14,779	15,910	16,646	17,162	17,664	18,261	18,864	19,461	20,077	20,697	21,333

Source: Congressional Budget Office.

Note: GDP = gross domestic product.

- Subtracts from debt held by the public the value of financial assets (such as preferred stock) purchased from institutions participating in the Troubled Asset Relief Program, holdings of preferred stock in Fannie Mae and Freddie Mac, the Treasury's purchases of mortgage-backed securities, cash balances, and other financial instruments.
- Comprises federal debt held by the public plus Treasury securities held by federal trust funds and other government accounts.
- The amount of federal debt that is subject to the overall limit set in law. Debt subject to limit differs from gross federal debt because most debt issued by agencies other than the Treasury and the Federal Financing Bank is excluded from the debt limit, currently set at \$14.7 trillion.

the \$1.8 trillion in appropriations projected for the 2012–2021 period (under the assumption that annual funding is set at \$159 billion plus adjustments for anticipated inflation).

In coming years, the funding required for war-related activities—in Afghanistan, Iraq, or other countries—may be smaller than the amounts in the baseline if the number of deployed troops is smaller and the pace of operations is diminished. Thus, CBO formulated a budget scenario that assumes a reduction in the deployment of U.S. forces abroad for military actions. Many other scenarios—some costing more and some less—also are possible.

In 2010, CBO estimates, the number of U.S. active-duty, reserve, and National Guard personnel deployed for war-related activities averaged about 215,000. Under the alternative scenario, the average number of military personnel deployed for war-related purposes would decline over five years: from 180,000 in 2011 to 130,000 in 2012; 95,000 in 2013; 65,000 in 2014; and 45,000 in 2015 and thereafter. (Those numbers could represent various allocations among Afghanistan, Iraq, and other countries.) Under the alternative scenario, total discretionary outlays for the period from 2012 through 2021 would be \$1.1 trillion less than the amount in CBO's current baseline.

Other Discretionary Spending. Many alternative assumptions about the growth of other discretionary spending are possible. For example, if appropriations (excluding those for operations in Afghanistan and Iraq) were assumed to grow each year through 2021 at the same rate as nominal GDP—instead of at the rates permitted by the Budget Control Act’s caps—discretionary spending would be \$2.4 trillion higher for that period than it is in the baseline. If appropriations were assumed to increase at the same rate as inflation after 2011, discretionary spending would be \$778 billion above the baseline over the 10-year period. In contrast, if lawmakers maintained appropriations over the 2014–2021 period at the 2013 cap, total discretionary outlays would be \$673 billion lower than the baseline between 2014 and 2021. Under that scenario (sometimes referred to as a freeze in appropriations), total discretionary spending would fall from 9.0 percent of GDP this year to 5.4 percent in 2021, lower than any share since 1962 (the earliest year for which such data have been reported).

Medicare’s Payments to Physicians. Under current law, starting in January 2012, spending for Medicare will be constrained by a rate-setting system—called the sustainable growth rate—that controls the fees paid for physicians’ services. If the system is allowed to operate as it is currently structured, physicians’ fees will be reduced by about 30 percent in January 2012 and by additional amounts in subsequent years, CBO projects. If, instead, lawmakers overrode those scheduled reductions (as has happened every year since 2003), spending on Medicare might be significantly greater than the amount projected in CBO’s baseline. For example, if payment rates remained the same from 2011 through 2021, outlays for Medicare (net of offsetting receipts) over the next 10 years would be about \$300 billion (roughly 5 percent) higher than they are in the baseline.

Revenues. Under the rules that govern CBO’s baseline, all of the provisions of the 2010 tax act are assumed to expire as scheduled over the next two years. Those expirations will increase revenues by raising individual income tax rates, reducing the child tax credit, eliminating the American Opportunity Credit, raising estate tax rates, lowering the effective exemption amount for the AMT, and making other changes.²⁴ If some of those expiring

provisions or others that are set to expire under current law were extended through 2021, total revenues could be significantly lower than in the baseline. For example, if certain income tax and estate and gift tax provisions (not including those related to the exemption amount for the AMT) were extended beyond the expiration dates set in the 2010 tax act, CBO and the staff of the Joint Committee on Taxation estimate that revenues would be lower (and, as a much smaller effect, outlays for refundable tax credits would be higher) by a total of \$2.5 trillion over the 2012–2021 period.²⁵ Under that scenario, the effect of reducing the amount of regular income tax that people owed would be partly offset by an increase in the amount of taxable income subject to the AMT.

Another policy that could alter revenues involves modifying the AMT. Because the exemption amount and brackets for the AMT do not automatically increase with inflation (as the parameters of the regular individual income tax do), much more income becomes subject to the AMT as time goes on. Under current law, that phenomenon will cause the impact of the AMT to increase sharply in coming years. If, instead, the parameters of the AMT were indexed for inflation after 2011 (with no other changes to the tax code), federal revenues over the next 10 years would be \$690 billion lower than the amount in the baseline.

The amount of income that is subject to the AMT will depend on whether the expiring tax provisions in the 2010 tax act remain in effect. If those provisions were extended and the AMT was indexed for inflation, the combination of the two changes would reduce revenues by \$799 billion more than the sum of the two policy alternatives (shown individually in Table 1-8). Thus, the total impact of extending certain income tax and estate and gift tax provisions that are set to expire in the next 10 years and of indexing the AMT for inflation would be to reduce revenues and increase outlays for refundable tax credits over the 2012–2021 period by \$3.9 trillion. Under that scenario, revenues from 2012 to 2021 would average about 18 percent of GDP, equal to their 40-year average.

If those extensions of expiring tax provisions were combined with an indexed AMT and with Medicare payment

24. The legislation also lowered the Social Security payroll tax through 2011. Extension of that provision is not included in any of the revenue scenarios discussed in this section.

25. That estimate excludes the effects that extending those provisions would have on the economy. For a discussion of those effects, see Chapter 2.

Table 1-8.**Budgetary Effects of Selected Policy Alternatives Not Included in CBO's Baseline**

(Billions of dollars)

												Total	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2012- 2016	2012- 2021
Policy Alternatives That Affect Discretionary Outlays													
Reduce the Number of Troops Deployed for Certain Types of Overseas Military Operations to 45,000 by 2015 ^a													
Effect on the deficit ^b	0	18	53	86	112	129	136	141	146	148	152	398	1,122
Debt service	0	*	1	2	5	11	19	27	36	45	55	19	202
Increase Discretionary Appropriations at the Rate of Growth of Nominal GDP ^c													
Effect on the deficit ^b	0	-39	-76	-115	-169	-222	-269	-313	-357	-402	-447	-620	-2,408
Debt service	0	*	-1	-3	-7	-17	-31	-48	-67	-89	-114	-29	-379
Increase Discretionary Appropriations at the Rate of Inflation ^d													
Effect on the deficit ^b	0	-27	-49	-62	-70	-77	-84	-91	-98	-106	-115	-285	-778
Debt service	0	*	-1	-2	-4	-8	-13	-19	-24	-31	-38	-15	-140
Freeze Discretionary Appropriations at the Level of the Cap for 2013													
Effect on the deficit ^b	0	0	0	11	27	46	68	92	117	143	168	85	673
Debt service	0	0	0	*	1	2	5	10	15	22	31	3	85
Policy Alternative That Affects Mandatory Outlays													
Maintain Medicare's Payment Rates for Physicians at the 2011 Rate ^e													
Effect on the deficit ^b	0	-12	-19	-23	-26	-29	-31	-34	-37	-41	-45	-109	-298
Debt service	0	*	*	-1	-1	-3	-5	-7	-9	-12	-14	-6	-53
Policy Alternatives That Affect the Tax Code ^f													
Extend Certain Income Tax and Estate and Gift Tax Provisions Scheduled to Expire on December 31, 2012 ^g													
Effect on the deficit ^b	0	-2	-108	-234	-266	-280	-292	-303	-313	-325	-337	-891	-2,461
Debt service	0	*	-1	-5	-11	-25	-42	-60	-79	-99	-120	-41	-443
Index the AMT for Inflation ^h													
Effect on the deficit ^b	0	-9	-93	-39	-45	-53	-63	-74	-88	-104	-121	-240	-690
Debt service	0	*	-1	-2	-4	-7	-11	-15	-20	-26	-33	-14	-119
Extend Certain Income Tax and Estate and Gift Tax Provisions Scheduled to Expire on December 31, 2012, and Index the AMT for Inflation ⁱ													
Effect on the deficit ^b	0	-11	-238	-340	-385	-414	-444	-476	-509	-546	-586	-1,389	-3,949
Debt service	0	*	-3	-8	-17	-39	-66	-94	-124	-156	-192	-67	-698
Extend Other Expiring Tax Provisions ^j													
Effect on the deficit ^b	0	-13	-77	-113	-100	-87	-80	-75	-72	-71	-73	-390	-761
Debt service	0	*	-1	-3	-6	-11	-17	-22	-28	-33	-38	-21	-159

Continued

Table 1-8.

Continued

Budgetary Effects of Selected Policy Alternatives Not Included in CBO's Baseline

(Billions of dollars)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total	
												2012-	2012-
												2016	2021
Memorandum:													
Total Outlays for Operations in Afghanistan and Iraq and for Similar Activities in CBO's Baseline	165	166	166	166	167	170	172	174	179	182	186	835	1,728
Total Deficit in CBO's Baseline	-1,284	-973	-510	-265	-205	-278	-231	-211	-259	-277	-279	-2,232	-3,487

Sources: Congressional Budget Office; Joint Committee on Taxation.

Notes: Positive numbers indicate a reduction in the deficit.

* = between -\$500 million and \$500 million; GDP = gross domestic product; AMT = alternative minimum tax.

- a. This alternative does not extrapolate the \$159 billion in budget authority for military operations and associated costs in Afghanistan and Iraq provided for 2011. However, it incorporates the assumption that future funding for operations in Afghanistan, Iraq, or elsewhere would total \$118 billion in 2012, \$82 billion in 2013, \$54 billion in 2014, and about \$35 billion a year from 2015 on—for a total of \$493 billion over the 2012–2021 period.
- b. Excluding debt service.
- c. Under this alternative, appropriations for 2011 for operations in Afghanistan and Iraq are assumed to grow at the rate of inflation from their 2011 level.
- d. Under this alternative, discretionary funding related to federal personnel is inflated using the employment cost index for wages and salaries. All other discretionary funding is adjusted using the GDP price index. These estimates are relative to CBO's August 2011 baseline, which incorporates the establishment of caps by the Budget Control Act of 2011 (Public Law 112-25).
- e. The estimates reflect the budgetary impact of this alternative relative to CBO's March 2011 baseline rather than its August 2011 baseline. It is unlikely that the estimated budgetary impact would change significantly if it were updated and measured relative to the August baseline.
- f. The estimates are from CBO and the staff of the Joint Committee on Taxation and are preliminary.
- g. This alternative incorporates the assumption that legislative action extends title I of the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (P.L. 111-312, which extended for 2011 and 2012 income tax provisions enacted in 2001, 2003, and 2009) and title III of that act (which modified estate and gift taxation for 2010 through 2012). It does not incorporate the assumption that the AMT is indexed for inflation; the effects of that alternative are shown separately.
- h. This alternative incorporates the assumption that the exemption amount for the AMT (which was increased through the end of 2011) is extended at its higher amount and, together with the AMT tax brackets, is indexed for inflation after 2011. In addition, the treatment of nonrefundable personal credits (which also was continued through the end of 2011) is assumed to be extended.
- i. The combination of extending certain income tax provisions scheduled to expire on December 31, 2012, and indexing the AMT for inflation reduces revenues by more than the sum of those alternatives considered alone. The total shown here includes an additional revenue loss of \$799 billion over the 2013–2021 period that results from the interaction of the two policies.
- j. These estimates include the impact of extending about 80 expiring provisions. Many of those credits are set to expire at the end of 2011, and many have been extended previously, such as the research and experimentation tax credit. The additional first-year depreciation deduction of 50 percent for business equipment is set to expire at the end of 2012.

rates that were unchanged (thereby keeping in place indefinitely several policies that recently have been extended for one or two years), deficits would rise, relative to the baseline projections for the 2012–2021 period, by nearly \$5.0 trillion (including debt service), to yield cumulative deficits of \$8.5 trillion over the 10-year period. As a share of GDP, deficits would average 4.3 percent over the coming decade and reach 4.7 percent by 2021 (see Figure 1-1 on page 3). Debt held by the public would reach 82 percent of GDP by the end of 2021, the largest share since 1948.

Other tax provisions, beyond the income tax and estate and gift tax provisions already discussed, also are scheduled to expire under current law. If all of the other tax provisions that are set to expire in the next 10 years (other than this year's payroll tax reduction) were extended, revenues would be lower and outlays for refundable tax credits would be higher by another \$761 billion over the 2012–2021 period than in the baseline. Therefore, the total impact of extending all of the expiring tax provisions (again, except for the payroll tax reduction) would be to reduce revenues and increase outlays for refundable tax credits over the next decade by \$4.7 trillion.

The Long-Term Budget Outlook

Beyond the coming decade, the fiscal outlook worsens. When CBO issued its most recent long-term projections in June 2011, debt held by the public was projected to reach 76 percent of GDP in 2021 under current law.²⁶ Beyond 2021, under an extension of current law labeled the “extended-baseline scenario,” debt was projected to rise to 84 percent of GDP in 2035. Because CBO's projections based on current law now show that debt held by the public will be declining relative to GDP after 2013 (to 61 percent in 2021), the long-term outlook under current law is a little brighter than it was earlier in the year. Even under the latest projections, however, debt would still be larger relative to GDP in 2021 than in any year between 1953 and 2009. Moreover, although long-term budget projections are highly uncertain, the aging of the population and rising costs for health care would almost certainly push federal spending up sharply relative to GDP after 2021 if current laws remained in effect. Federal revenues also would continue to increase relative

to GDP after 2021 under current law, reaching significantly higher percentages of GDP than ever seen before in the United States. CBO has not updated its long-term projections to reflect its new 10-year baseline, and the net effect of those outlay and revenue trends on budget deficits beyond 2021 is not clear.

The budget outlook is much bleaker—both for the next 10 years and over the longer term—under certain policy assumptions other than those underlying CBO's baseline. In CBO's long-term projections issued in June, the agency also examined an “alternative fiscal scenario,” which incorporated several changes to current law that are widely expected to occur or that would modify some provisions of law that might be difficult to sustain for a long period. Thus, that scenario maintained what some analysts might consider “current policy” as opposed to current law, especially regarding revenues. Specifically, the tax provisions enacted since 2001 that were extended most recently in 2010 were assumed to be extended, the reach of the AMT was assumed to be restrained to stay close to its historical extent, and tax law was assumed to evolve over the long term so that revenues remained near their historical average of 18 percent of GDP. CBO projected in June that, under the alternative fiscal scenario, revenues would increase much more slowly than spending, and debt held by the public would balloon to nearly 190 percent of GDP by 2035. Although new long-term projections reflecting the latest 10-year projections would differ, the amounts of federal borrowing that would be required under those policy assumptions clearly would be unsustainable.

Moreover, the projections of federal debt that CBO highlighted in June for the alternative fiscal scenario do not include the harmful effects of rising debt on economic growth and interest rates. If those effects were taken into account, projected debt would increase even more rapidly. Large budget deficits and growing debt would reduce national saving, thus leading to higher interest rates, more borrowing from abroad, and less domestic investment—which in turn would lower real GDP and income in the United States relative to what would otherwise occur. Furthermore, paying for the rising costs of interest through higher marginal tax rates could discourage work and saving and reduce output even more, while making room in the budget for those interest costs by reducing spending on government programs would have other economic and social consequences.

26. See Congressional Budget Office, *CBO's 2011 Long-Term Budget Outlook* (June 2011).

An increasing federal debt relative to the size of the economy also would boost the probability of a sudden fiscal crisis, during which investors would lose confidence in the government's ability to manage its budget, and the government would lose its ability to borrow at affordable rates. At the same time, burgeoning debt would increasingly restrict policymakers' ability to use tax and spending policies to respond to unexpected challenges, such as economic downturns or financial crises.

The explosive path of federal debt under the alternative fiscal scenario shows that the combination of policies that underlie that scenario cannot be continued for the next several decades. To put the federal budget on a

sustainable course, policymakers will need to increase revenues substantially as a percentage of GDP, decrease spending significantly from projected levels, or adopt some combination of those two approaches. With economic activity and employment currently well below what could be achieved if the nation's labor force and capital stock were fully utilized, the act of raising revenues or curbing spending immediately would probably slow the tentative economic expansion. However, the sooner that medium- and long-term changes to spending and revenue policies are agreed upon—and the sooner they are implemented after the period of economic weakness—the smaller will be the damage to the economy from rising federal debt.

The Economic Outlook

The financial crisis and recession have cast a long shadow on the U.S. economy. Although total output began to expand again two years ago, the pace of the recovery has been slow, and the economy remains in a severe slump. Growth in economic activity and employment was especially slow in the first half of calendar year 2011, and turmoil in U.S. and overseas financial markets in recent weeks will have a dampening effect on growth in the near future. However, some of the factors that appear to have contributed to economic weakness in the first half of this year—such as a reduction in consumers’ purchasing power because of a rise in the price of crude oil—are set to fade in the second half of the year. The Congressional Budget Office (CBO) expects that the economic recovery will continue but that real (inflation-adjusted) gross domestic product (GDP) will stay below the economy’s potential—a level that corresponds to a high rate of use of labor and capital—until 2017 (see Figure 2-1).

CBO initially completed its economic forecast in early July, but it updated the forecast in early August to reflect the policy changes enacted in the Budget Control Act of 2011 (Public Law 112-25), which CBO estimates will reduce federal budget deficits by \$2.1 trillion over the next 10 years (see Box 1-1 on page 6). However, the forecast described here does not reflect any other developments since early July, including the recent swings in financial markets and the annual revision to the national income and product accounts (discussed in Box 2-1 on page 34). Incorporating that recent news and economic data would have led CBO to temper its near-term forecast for economic growth.

CBO projects that real GDP will increase modestly in 2011 and 2012: by 2.3 percent this year (as measured by the change between the fourth quarter of 2010 and the fourth quarter of 2011) and by 2.7 percent next year (see Table 2-1). That forecast reflects CBO’s expectation of

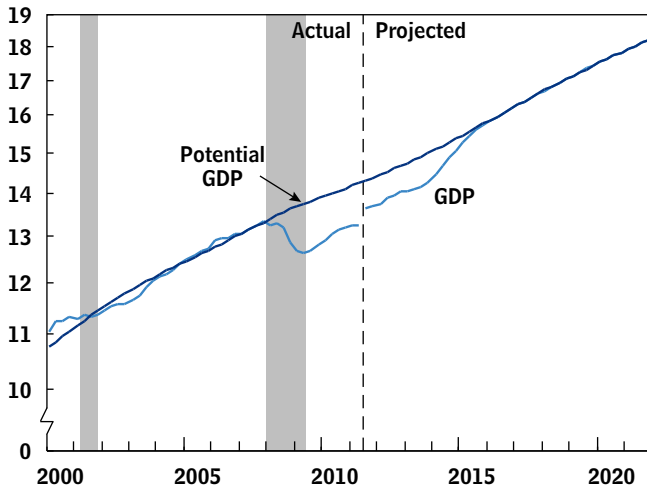
continued strong growth in investment by businesses, moderate increases in spending by consumers, gains in net exports (exports minus imports), and the beginning of a recovery in new-home construction.

With the projection of modest growth in output, CBO expects employment to expand slowly during the rest of this year and next year. Weakness in the demand for goods and services is the principal restraint on hiring, but structural impediments in the labor market—such as a mismatch between the requirements of existing job openings and the characteristics of job seekers (including their skills and geographic location)—appear to be hindering hiring as well. As a result, the unemployment rate is projected to fall from an average of 9.1 percent in the second quarter of 2011 only to 8.9 percent in the fourth quarter of 2011 and to 8.5 percent in the fourth quarter of 2012 (see Figure 2-2).

Inflation increased markedly in the first half of 2011, spurred in large part by a sharp rise in oil prices, but CBO projects that it will diminish in the second half of the year and remain low in 2012. The increase in oil prices since mid-2010 has been partly reversed, and trading in financial markets points to fairly stable prices for oil and other commodities in the next few years. In addition, the large amount of unused or underemployed resources in the economy will continue to hold down the growth of wages and prices. Accordingly, CBO projects that the price index for personal consumption expenditures (PCE) will increase by 2.4 percent this year and by 1.3 percent next year (as measured by the change from the fourth quarter of the previous year). The “core” version of the PCE price index, which excludes prices for food and energy, is projected to rise by 1.7 percent in 2011 and by 1.4 percent in 2012. The consumer price index for all urban consumers (CPI-U) and its core version are expected to increase at roughly the same rates as, or slightly higher rates than, their PCE counterparts.

Figure 2-1.**Real Gross Domestic Product**

(Trillions of 2005 dollars, logarithmic scale)



Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

Notes: Real gross domestic product (GDP) is the output of the economy adjusted to remove the effects of inflation. Potential GDP is CBO's estimate of the output that the economy would produce with a high rate of use of its labor and capital resources.

Data are quarterly. Actual data for GDP, which are plotted through the second quarter of 2011, incorporate the July 2011 revisions of the national income and product accounts. Projections of GDP, which are plotted through the fourth quarter of 2021, are based on data issued before the revisions.

CBO's projected paths for inflation and economic growth suggest that interest rates will remain quite low for the rest of 2011 and 2012. In CBO's forecast, the interest rate on 3-month Treasury bills averages barely above zero in both years, and the rate on 10-year Treasury notes averages close to 3¼ percent in both years.

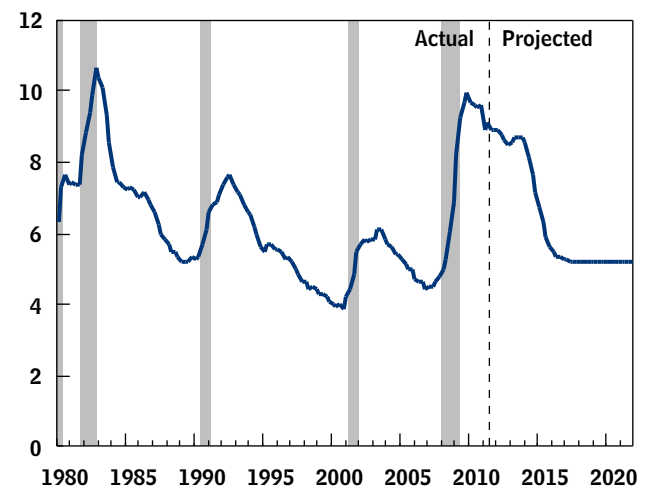
Under current law, federal fiscal policy will impose substantial restraint on the economy in 2013. For example, the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (P.L. 111-312, referred to here as the 2010 tax act) delayed—in most cases until 2013—tax increases and spending cuts that would otherwise have occurred in 2011. (It also reduced the percentage of income that employees pay in payroll taxes for Social Security during 2011; the expiration of that reduction will dampen growth in 2012.) In addition, under CBO's baseline budget projections, the provisions

of the Budget Control Act will lead to significant fiscal restraint in 2013, which will further dampen growth in that year. CBO's forecast incorporates the effects of the tax increases and spending cuts stemming from the combination of the 2010 tax act and the Budget Control Act. (However, the reduction in budget deficits that will result from those laws will strengthen output and income later in the decade; CBO's forecast reflects those effects as well.)

For the 2013–2016 period, CBO projects that real GDP will grow by an average of 3.6 percent a year, considerably faster than potential output. That growth will bring the economy to a high rate of resource use (that is, completely close the gap between the economy's actual and potential output) by 2017. Inflation as measured by the PCE and consumer price indexes is projected to average 1.6 percent to 1.7 percent per year between 2013 and 2016, and the unemployment rate is projected to decline to 5.3 percent by the second half of 2016. CBO projects that interest rates will rise as the economy approaches its potential level, with the rate on 3-month Treasury bills

Figure 2-2.**Unemployment Rate**

(Percent)



Sources: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics.

Notes: The unemployment rate is a measure of the number of jobless people who are available for work and are actively seeking jobs, expressed as a percentage of the labor force.

Data are quarterly. Actual data are plotted through the second quarter of 2011; projections are plotted through the fourth quarter of 2021.

Table 2-1.**CBO's Economic Projections for Calendar Years 2011 to 2021**

	Forecast		Projected Annual Average	
	2011	2012	2013-2016	2017-2021
Fourth Quarter to Fourth Quarter (Percentage change)				
Gross Domestic Product				
Real	2.3	2.7	3.6	2.4
Nominal	3.8	4.0	5.2	4.5
Inflation				
PCE price index	2.4	1.3	1.6	2.0
Core PCE price index ^a	1.7	1.4	1.6	2.0
Consumer price index ^b	2.8	1.3	1.7	2.3
Core consumer price index ^a	1.7	1.3	1.7	2.2
GDP price index	1.4	1.3	1.6	2.0
Employment Cost Index ^c	2.2	2.9	3.4	3.5
Fourth-Quarter Level (Percent)				
Unemployment Rate	8.9	8.5	5.3 ^d	5.2 ^e
Year to Year (Percentage change)				
Gross Domestic Product				
Real	2.4	2.6	3.6	2.5
Nominal	3.9	3.8	5.1	4.5
Inflation				
PCE price index	2.2	1.4	1.5	2.0
Core PCE price index ^a	1.3	1.4	1.5	2.0
Consumer price index ^b	2.9	1.5	1.6	2.3
Core consumer price index ^a	1.5	1.4	1.6	2.2
GDP price index	1.5	1.2	1.5	2.0
Employment Cost Index ^c	1.9	2.8	3.3	3.5
Calendar Year Average				
Unemployment Rate (Percent)	8.9	8.7	7.0	5.2
Interest Rates (Percent)				
Three-month Treasury bills	0.1	0.1	1.5	4.0
Ten-year Treasury notes	3.3	3.2	4.1	5.3
Tax Bases (Percentage of GDP)				
Wages and salaries	43.5	44.1	44.5	45.2
Domestic economic profits	8.6	8.5	8.3	7.3

Source: Congressional Budget Office.

Notes: Economic projections for each year from 2011 to 2021 appear in Appendix B.

PCE = personal consumption expenditures; GDP = gross domestic product.

- a. Excludes prices for food and energy.
- b. The consumer price index for all urban consumers.
- c. The employment cost index for wages and salaries of workers in private industry.
- d. Value for 2016.
- e. Value for 2021.

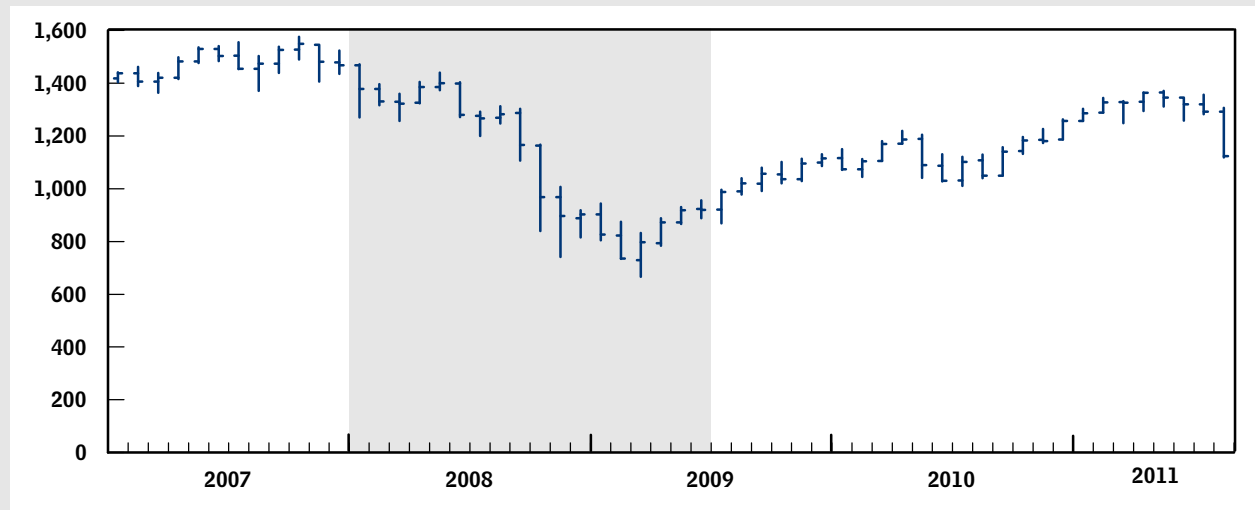
Box 2-1.**Economic News Since Early July**

The Congressional Budget Office (CBO) initially completed its economic projections in early July, and the only updates to those projections since that time reflect the policy changes enacted in the Budget Control Act of 2011. However, the period since early July has also seen significant financial and economic news. Stock prices, as measured by the value of the Standard & Poor's 500 index, dropped by more than 15 percent between early July and mid-August, returning to their level of late 2010 (see the figure below). Oil prices also fell back in July from their recent highs. In addition, interest rates on 10-year Treasury notes have dropped by almost a full percentage point since early July—mainly because concerns

about a weaker U.S. economy and potential losses on the sovereign debt of some major euro-zone countries have led participants in financial markets to seek safer investments, and because the Federal Reserve signaled its intention to keep short-term interest rates low for an even longer period than many market participants may have expected. In the nonfinancial sector, the data that have been released since early July generally suggest weaker-than-expected economic growth in the near term; however, they also point to stabilization in homebuilding and house prices and to a recovery in vehicle sales and production after supply disruptions earlier in the year.

S&P 500 Index of Stock Prices

(Index, 1941–1943 = 10)



Sources: Congressional Budget Office; Bloomberg.

Notes: The Standard & Poor's (S&P) 500 index includes the prices of actively traded common stocks of 500 leading companies in key industries of the U.S. economy.

Data are monthly (the value for August 2011 runs through August 19). The span of each line reflects the high and low index values for that month, and the marks on each line show the opening (left-hand) and closing (right-hand) values for the month.

Continued

Box 2-1.**Continued****Economic News Since Early July**

In late July, the Commerce Department's Bureau of Economic Analysis (BEA) released its annual revision of the national income and product accounts (NIPAs), which track the amount and composition of gross domestic product (GDP), the prices of its components, and the way in which the costs of production are distributed as income. That revision, which came too late to be factored into CBO's economic forecast, incorporates new data from a variety of sources and some changes in methods and definitions.¹

According to BEA, real (inflation-adjusted) GDP grew at an average annual rate of 0.8 percent in the first half of calendar year 2011—well below the 1.9 percent estimate that CBO used in constructing its economic forecast. In addition, revisions to data for 2008 through 2010 reveal that the recession was considerably deeper than previously thought: The total decline in real GDP during the recession—from GDP's peak in the fourth quarter of 2007 to its trough in the second quarter of 2009—was revised

downward from -4.1 percent to -5.1 percent. The subsequent growth of real GDP from the trough to the first quarter of 2011 was also revised downward slightly. In all, the level of real GDP in the first quarter of the year was revised downward by 1.6 percent.

BEA revised some measures of inflation upward slightly, raising the average annual growth rate of the personal consumption expenditures (PCE) price index for the 2008–2010 period by 0.1 percentage point, to 1.5 percent. (The average annual growth rate of the core PCE price index, which excludes food and energy prices, was left unrevised at 1.5 percent for the 2008–2010 period.)

The forecast that CBO presents in this report does not incorporate those recent economic developments or the NIPA revisions. An initial review of the news since early July suggests a somewhat weaker outlook for the economy in the near term than in CBO's forecast. It is too early to determine whether the NIPA revisions will lead to a significant change in CBO's projection for potential output. Although the average annual growth rate of labor productivity over the 2008–2010 period was revised downward by 0.4 percentage points, BEA has not yet released revised information on capital stocks, which CBO will use to produce a revised estimate of potential GDP.

1. See Department of Commerce, Bureau of Economic Analysis, "National Income and Product Accounts Gross Domestic Product: Second Quarter 2011 (Advance Estimate) Revised Estimates: 2003 Through First Quarter 2011," News Release BEA 11-38 (July 29, 2011), www.bea.gov/newsreleases/national/gdp/2011/pdf/gdp2q11_adv.pdf.

averaging 1.5 percent between 2013 and 2016 and the rate on 10-year Treasury notes averaging 4.1 percent over that period.

The recent recession was unusual compared with previous U.S. business cycles in terms of its causes, size, and duration. As a result, the recovery to date has had unusual features that have been hard to predict, and the path of the economy in coming years is also likely to be surprising in various ways. Many developments, such as changes in the degree to which households want to reduce their debt burdens further, could cause economic outcomes to differ substantially, in one direction or the other, from

those CBO has projected. Therefore, although economic forecasts are always subject to considerable uncertainty, the current outlook continues to be especially uncertain.

Beyond 2016, CBO's economic forecast is based on the assumption that real GDP will grow at its potential rate, because CBO does not attempt to predict the timing or magnitude of fluctuations in the business cycle so far into the future. Thus, CBO's projections for 2017 through 2021 reflect the agency's assessment of economic conditions when real GDP is at its potential level. Real GDP is projected to grow at an average annual rate of 2.4 percent during those years, and the unemployment rate is

projected to average 5.2 percent, equal to CBO's estimate for that period of the so-called natural rate of unemployment (the rate of unemployment arising from sources other than the business cycle). Inflation, as measured by the PCE price index, is projected to average 2.0 percent per year between 2017 and 2021, and interest rates on 3-month Treasury bills and 10-year Treasury notes are projected to average 4.0 percent and 5.3 percent, respectively.

Compared with CBO's previous economic forecast, which was issued in January, the agency is currently projecting weaker growth of real GDP and somewhat higher inflation in 2011 and 2012 (on the basis of economic and financial data through early July). The current forecast also includes a slightly lower unemployment rate in 2011—because of an unexpected drop in that rate at the end of last year and in the first quarter of this year—but higher unemployment rates from 2012 through 2016. CBO has decreased its projections of both 3-month and 10-year interest rates for the entire 2011–2021 period; that decrease largely reflects changes in market interest rates between late 2010 and early July, as well as the estimated impact of the Budget Control Act. (Rates on Treasury securities implied by current transactions in financial markets are close to or below CBO's projections of those rates throughout the 2011–2021 period.)

CBO's current economic forecast differs in some respects from the consensus of June forecasts by Federal Reserve Board members and Federal Reserve Bank presidents, as well as from the August *Blue Chip* consensus forecast (which is based on about 50 forecasts by private-sector economists). CBO's projection for the growth of real GDP in 2011 is appreciably stronger than that of the *Blue Chip* but weaker than that of the Federal Reserve. For 2012, CBO's projection of real GDP growth is the same as the *Blue Chip* consensus but slightly lower than the central tendency of Federal Reserve forecasts.¹ CBO's projection of real GDP growth in 2013 is well below the Federal Reserve forecasts. CBO's projections of inflation over the next few years are close to those of the Federal Reserve but significantly lower than those of the *Blue Chip*. Those differences stem from a variety of factors,

including the economic news available when the forecasts were completed (the Federal Reserve forecasts were made before CBO initially completed its forecast, whereas the *Blue Chip* predictions were made only a few weeks ago); assumptions about the government's future tax and spending policies; and the economic and statistical models used by the different forecasters.

The Outlook Through 2016

In CBO's forecast, the pace of economic recovery picks up a little in the second half of this year but remains moderate for the next few years. Growth slowed and inflation increased in the first half of 2011, in part because of developments that are likely to be temporary, including jumps in energy and food prices and disruptions to the global supply chain caused by the earthquake and nuclear accident in Japan. As the effects of those developments fade, growth in the U.S. economy is likely to rebound a little, driven by continued strength in business investment, modest increases in consumer spending, and expansions in net exports and residential investment (which includes new-home construction, home improvements, and brokers' commissions on home sales). Nevertheless, the pace of growth will probably be restrained for several more years by the lingering effects of the financial crisis and the recession—particularly their impact on households' net worth and indebtedness, on access to credit for riskier borrowers, on the number of vacant homes, and on household and business confidence. Moreover, the significant decline in stock prices and weakness in some economic indicators since early July, when CBO completed its economic forecast (apart from incorporating the effects of the Budget Control Act), suggest that near-term growth is likely to be slower than projected here.

CBO's economic projections are based on the assumption that the federal government's tax and spending policies will follow current law—an assumption that has a large impact on the projections. Under current law, the contribution of federal fiscal policy to economic growth, which has waned over the past year, will diminish substantially during the next few years. A different path for fiscal policy could lead to different economic outcomes; for example, continuing all or some of the tax cuts temporarily extended by the 2010 tax act would lead to greater economic output in 2012 and 2013 but lower output in the second half of the coming decade.

1. The central tendency is the range of projections by members of the Federal Reserve's Board of Governors and the presidents of the Federal Reserve Banks, with the three highest and three lowest projections omitted.

Although the economic upturn since mid-2009 has been weak compared with other U.S. recoveries since World War II, its pace is broadly consistent with international experience of recoveries following financial crises.² In the aftermath of such a crisis, it takes time for households to rebuild their wealth and pay down their debts, for financial institutions to restore their capital bases and the supply of credit, and for nonfinancial businesses to regain the confidence necessary to invest in new plant and equipment. At the end of June, measures of business sentiment suggested that managers of large companies were becoming more confident (which is consistent with high stock prices and low labor costs); however, confidence among consumers and small businesses remained very low, in part because of the weak condition of the labor and housing markets. Perhaps as a result, households' spending has been even lower than the amounts of household wealth and income would normally imply. In addition, the number of excess vacant homes remains substantial, discouraging the sort of increase in housing construction that often contributes to rapid growth during economic recoveries.³ All of those factors have played a role in the slow pace of recovery since the end of the recession in 2009 and many will continue to weigh on economic growth in the coming years.

Fiscal Policy

Under current law, federal fiscal policy—including the effects of both legislative actions and automatic changes

in the budget—will provide decreasing support for economic activity this year and significantly restrain economic growth in 2012 and 2013.⁴ One reason for that pattern is that the stimulative impact of the American Recovery and Reinvestment Act (ARRA, P.L. 111-5) is winding down. CBO estimates that relative to what would have happened without that law, ARRA raised real GDP by between 1.5 percent and 4.2 percent in 2010 but will increase GDP by a smaller amount in 2011 and by even less in 2012.⁵ ARRA's boost to employment is also diminishing. CBO estimates that the law raised employment (relative to what it would have been otherwise) by between 1.3 million and 3.3 million people in 2010, but the law's impact on employment is projected to be progressively smaller in 2011 and 2012.

Another reason for the decrease in economic support from fiscal policy is that the effect of the government's so-called automatic fiscal stabilizers is declining as the economy continues to grow (albeit slowly). Those stabilizers are the automatic responses of revenues and outlays to cyclical movements in real GDP and unemployment. For example, when GDP falls relative to potential GDP during a recession, the reduction in income causes tax revenues to decrease automatically. In addition, some outlays—such as for unemployment insurance and federal nutrition benefits—automatically increase. Those automatic responses provide fiscal support when economic activity slows and provide fiscal restraint when economic activity picks up.⁶ Federal fiscal support from the automatic stabilizers equaled roughly 2½ percent of potential GDP in 2010, CBO estimates, but is likely to be smaller in 2011 and 2012.

2. See, for example, Carmen M. Reinhart and Kenneth S. Rogoff, "The Aftermath of Financial Crises," *American Economic Review*, vol. 99, no. 2 (May 2009), pp. 466–472; and Carmen M. Reinhart and Vincent R. Reinhart, "After the Fall," in Federal Reserve Bank of Kansas City, *Macroeconomic Challenges: The Decade Ahead* (Kansas City: Federal Reserve Bank, 2011). For a discussion of policy responses to banking crises, see Luc Laeven and Fabian Valencia, *Resolution of Banking Crises: The Good, the Bad, and the Ugly*, Working Paper 10/146 (Washington, D.C.: International Monetary Fund, June 2010). Although financial crises have been studied extensively, aspects of why they are followed by slow recoveries remain unclear; see, for example, Robert E. Hall, "Why Does an Economy Fall to Pieces after a Financial Crisis?" *Journal of Economic Perspectives*, vol. 24, no. 4 (Fall 2010), pp. 3–20.
3. Excess vacant homes are measured as the difference between the actual number of vacant housing units (including those for sale or rent, second homes, and units held off the market for various reasons) and an estimate of the number that would be vacant under normal market conditions. The number of excess vacant units probably better reflects the excess supply of housing than does the total inventory of units for sale.

4. Weak growth in outlays by state and local governments will also slow economic growth in those years, but that effect will be largely offset by weak growth in those governments' collections of tax revenues because of the modest recovery.
5. In estimating the effects of ARRA, CBO selected low and high estimates of the effects of each provision of the law; those estimates were chosen to encompass most economists' views about the effects of that type of provision. For a discussion of CBO's estimation methods, see Congressional Budget Office, *Estimated Impact of the American Recovery and Reinvestment Act on Employment and Economic Output From January 2011 Through March 2011* (May 2011).
6. For more information about automatic fiscal stabilizers, see Congressional Budget Office, *The Effects of Automatic Stabilizers on the Federal Budget* (April 2011).

The economic support provided by federal fiscal policy will also diminish as provisions of the 2010 tax act expire as scheduled over the next two years and as the Budget Control Act is implemented.

- The 2010 tax act extended numerous tax cuts that were slated to expire at the end of 2010; for example, it continued through 2012 various tax reductions enacted in the Economic Growth and Tax Relief Reconciliation Act of 2001 and the Jobs and Growth Tax Relief Reconciliation Act of 2003, and it extended through 2011 provisions limiting the reach of the alternative minimum tax (AMT).⁷ It also reduced the employee's share of the Social Security payroll tax in 2011, provided temporary tax incentives for business investment, and extended certain additional unemployment insurance benefits through January 3, 2012.
- The Budget Control Act set caps on discretionary spending that will reduce such spending in real terms over time. It also created a Congressional Joint Select Committee on Deficit Reduction, whose stated goal is to propose further policy changes that would save at least \$1.5 trillion over 10 years. If, by January 15, 2012, legislation originating from that committee and projected to achieve at least \$1.2 trillion in savings over the next 10 years is not enacted, automatic procedures established by the new law will reduce spending between fiscal years 2013 and 2021 by the difference between \$1.2 trillion and any savings that are achieved by enacting proposals from the committee. That spending reduction (with an allowance for interest savings subtracted) would be distributed evenly among those fiscal years. Because CBO cannot predict what legislation from the deficit reduction committee might be enacted, the forecast presented here is based on the amounts of the automatic spending reductions (an estimated \$111 billion per year), which would have their biggest effect on the growth of GDP in 2013, when they first take effect.

CBO estimates that the fiscal restraint stemming from the expiration of provisions in the 2010 tax act and from enactment of the Budget Control Act will decrease real

GDP in 2013 by between about 1½ percent and about 3½ percent compared with what it would have been otherwise.⁸ However, CBO also estimates that the reduction in deficits resulting from those policies will boost output later in the decade.

Future fiscal policy is likely to differ from that embodied in current law in at least some respects. For example, the Congress might enact legislation from the deficit reduction committee that includes a different timing or composition of policy changes than CBO has assumed on the basis of the amounts of the automatic spending cuts, or the Congress might alter fiscal policy in other ways. To illustrate how some widely anticipated changes to current law would affect the economy, CBO has examined an alternative path for fiscal policy that includes the following assumptions: Most of the cuts in individual income taxes and estate and gift taxes now scheduled to expire in 2012 or 2013 are extended through 2021; limits to the reach of the AMT that are set to expire at the end of 2011 are also continued through 2021; and Medicare's payment rates for physicians are maintained at their 2011 levels. (Those possible changes to current law would be a continuation of current policies that have previously been extended; they do not represent a prediction or recommendation about future policies.) Under that set of policies, budget deficits would be significantly larger than in CBO's baseline budget projections, and federal debt held by the public would accumulate much more rapidly.

Under those alternative assumptions, real GDP would be higher in the first few years of the projection period than in CBO's baseline economic forecast (see Table 2-2). For example, CBO estimates that the size of real GDP in 2013 would be between 0.6 percent and 2.3 percent greater than projected under current law. That year, real GDP would grow by between 2.0 percent and 3.5 percent (as measured from the fourth quarter of the previous year), CBO estimates—significantly higher than in the baseline projection. Faster GDP growth would result in a lower unemployment rate and somewhat higher interest

7. The AMT is intended to curtail the extent to which higher-income people can reduce their tax liability through the use of preferences in the tax code. CBO anticipates that the impact of higher taxes under the AMT will largely be delayed until 2013, when most of those additional taxes will be paid if no further legislation limiting the reach of the AMT is enacted.

8. To reflect the high degree of uncertainty that accompanies estimates of the economic impact of fiscal policy, CBO used a range of assumptions about the extent to which changes in taxes and government spending affect the demand for goods and services, budget deficits affect private investment, and changes in marginal tax rates on labor income affect the labor supply. For more information about CBO's assumptions, see Congressional Budget Office, *The Macroeconomic and Budgetary Effects of an Illustrative Policy for Reducing the Federal Budget Deficit* (July 2011).

Table 2-2.

Economic Effects of the Continuation of Certain Policies Not Included in CBO's Baseline

(Selected calendar years)

	2012	2013	2021
Real GDP (Percentage difference from baseline)	0.1 to 0.3	0.6 to 2.3	-1.9 to -0.3
Growth in Real GDP (Percentage change from fourth quarter to fourth quarter)			
Baseline	2.7	1.5	2.3
Continuation of certain policies	2.8 to 3.0	2.0 to 3.5	2.0 to 2.2
Difference (Percentage points)	0.1 to 0.3	0.5 to 1.9	-0.3 to -0.1
Unemployment Rate (Fourth-quarter level, in percent)			
Baseline	8.5	8.7	5.2
Continuation of certain policies	8.4 to 8.5	7.6 to 8.4	5.2 ^a
Difference (Percentage points)	-0.1 to 0	-1.1 to -0.3	0 ^a
Interest Rate on Three-Month Treasury Bills (Fourth-quarter level, in percent)			
Baseline	0.2	0.3	4.0
Continuation of certain policies	0.2 ^a	0.3 ^a	4.4 to 4.5
Difference (Percentage points)	0 ^a	0 ^a	0.4 to 0.5
Interest Rate on Ten-Year Treasury Notes (Fourth-quarter level, in percent)			
Baseline	3.3	3.4	5.3
Continuation of certain policies	3.3 ^a	3.7 ^a	5.6 to 5.8
Difference (Percentage points)	0 ^a	0.2 to 0.3	0.4 to 0.5

Source: Congressional Budget Office.

Notes: The projections with the continuation of certain policies are based on several assumptions: first, that most of the provisions of the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (Public Law 111-312) that originally were enacted in 2001, 2003, 2009, and 2010 do not expire on December 31, 2012, but instead continue; second, that the alternative minimum tax is indexed for inflation after 2011; and third, that Medicare's payment rates for physicians are held constant at their 2011 level.

Ranges of estimated effects are shown for the continued policies to reflect the uncertainty that exists about many of the economic relationships that are important in the models used to calculate those effects.

a. The span of the range of estimates is less than 0.1 percentage point and disappears with rounding.

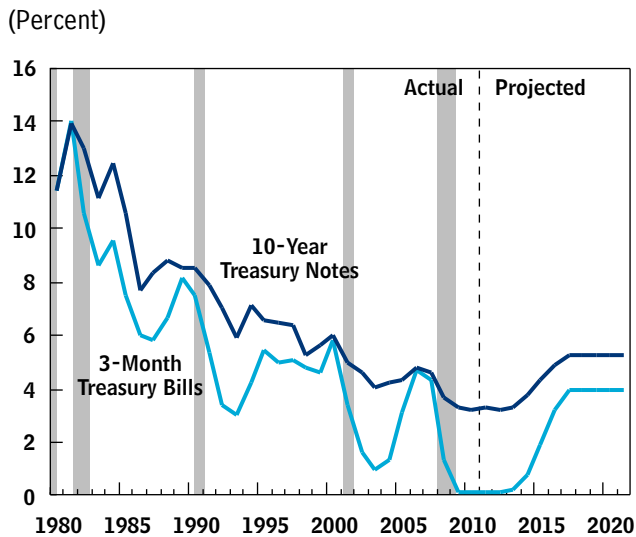
rates over the next few years. In later years, however, real GDP would fall below the level in CBO's baseline projection by increasing amounts over time. The lower marginal tax rates under those alternative assumptions would increase people's incentives to work and save, but the larger budget deficits would reduce ("crowd out") private investment in productive capital. By the end of 2021, as the effect of larger budget deficits outweighed that of lower tax rates, real GDP would be between 0.3 percent and 1.9 percent smaller than it would be under current law, CBO estimates.⁹ In years beyond 2021, the effects would become even larger.

Monetary Policy and Interest Rates

Consistent with its forecast of modest economic growth through 2013 under current law, CBO projects that interest rates will remain very low for the next few years and then rise to more-normal levels as output approaches its potential in 2017 (see Figure 2-3). That outlook is

9. The additional growth in federal debt under those alternative assumptions would also increase the risk of a fiscal crisis; see Congressional Budget Office, *Federal Debt and the Risk of a Fiscal Crisis*, Issue Brief (July 2010).

Figure 2-3.
Interest Rates



Sources: Congressional Budget Office; Federal Reserve.

Note: Data are annual. Actual data are plotted through 2010; projections are plotted through 2021.

based in part on CBO's view that as long as inflation is low and the economy contains a significant amount of unused labor and other productive resources, the Federal Reserve will not raise the federal funds rate (an interest rate on overnight lending among banks that the Federal Reserve adjusts to conduct monetary policy) or reverse the extraordinary increase in the amount of assets that it holds.¹⁰ Indeed, in response to the unexpectedly weak economic activity in the first half of this year, the Federal Reserve announced on August 9 that it intends to keep the federal funds rate exceptionally low through at least mid-2013.

CBO's forecast for interest rates on 3-month Treasury bills for the next few years is broadly consistent with the path implied by current transactions in financial markets, but its forecast for short-term rates later in the decade is above that implied path. Similarly, CBO's forecast for interest rates on 10-year Treasury notes is close to market

expectations through 2015 but above those expectations later in the decade. The differences between CBO's projected interest rates and the rates implied by current market transactions probably stem from a number of factors, including economic news since CBO completed its forecast.

Consumer Spending and the Housing Market

The growth of households' spending on consumer goods and services will rebound somewhat from its recent slow pace but remain subdued for the next few years, CBO projects. After increasing by 3.0 percent during 2010 (as measured from the fourth quarter of the previous year), real personal consumption expenditures grew at an average annual rate of 1.1 percent in the first half of 2011. Part of that slowdown, especially in the second quarter of 2011, resulted from factors that are likely to prove temporary, including shortages of parts for automobiles and electronics equipment caused by the earthquake and nuclear accident in Japan. Higher oil prices also restrained consumer spending during the first half of 2011, mostly through their impact on real disposable income. However, consumer spending has been lower in the past year than the levels that would normally occur given consumers' income and wealth—suggesting that other factors, such as pessimism about the prospects for income growth, may be restraining spending. As an example, for much of 2011 so far, only about 10 percent of consumers have expected to see real gains in their income in the year ahead, matching a level of pessimism last seen in 1980.

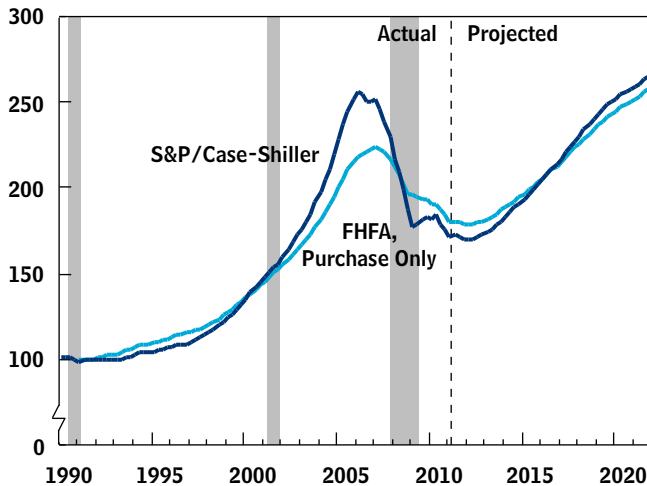
In CBO's forecast, consumer spending improves slightly with the fading of the temporary factors mentioned above and with continued improvement in the availability of credit. Consumer spending is expected to slow considerably in the first half of 2013—as tax cuts expire and the deficit reduction assumed to result from the Budget Control Act takes effect—but it is projected to pick up again thereafter.

CBO projects that residential construction will increase in 2012. Still, with an unusually large number of vacant homes and continued problems in private mortgage markets, CBO expects that it will take several years for the construction of new housing units to return to levels consistent with the growth of the population and the demand for replacement units.

10. At the end of July 2011, the Federal Reserve held more than \$2.8 trillion in assets, more than triple the amount it held before the financial crisis. That increase resulted from a set of policies that the Federal Reserve implemented to mitigate the effects of the financial crisis and the recession; see Congressional Budget Office, *The Budgetary Impact and Subsidy Costs of the Federal Reserve's Actions During the Financial Crisis* (May 2010).

Figure 2-4.
House Prices

(Index, 1991 = 100)



Sources: Congressional Budget Office; Federal Housing Finance Agency (FHFA); Standard & Poor's (S&P) Financial Services.

Notes: An important difference between the FHFA purchase-only price index and the S&P/Case-Shiller national home price index involves their coverage of home sales. The FHFA index covers only homes financed using mortgages that have been purchased or securitized by Fannie Mae or Freddie Mac. The S&P/Case-Shiller index also includes sales financed with mortgages that do not conform to the size or credit criteria for purchase by Fannie Mae or Freddie Mac.

Data are quarterly. Actual data are plotted through the first quarter of 2011; projections are plotted through the fourth quarter of 2021.

Income. A continued slow recovery in employment (discussed below) generates modest growth in wages and salaries in CBO's forecast. In the first half of 2011, nominal wages and salaries moved up slowly, but real disposable (after-tax) personal income was essentially unchanged, bolstered further by the provisions of the 2010 tax act but held down by an increase in consumer prices. Disposable income will continue to be supported by the 2010 tax act in the second half of this year, although it will lose some of that support in 2012 and much of the rest in 2013 when major tax provisions expire. However, CBO projects that real income will be buoyed later this year and over the next few years by a moderation in inflation (also discussed below). As a result, in CBO's forecast, the growth rate of real disposable personal income increases in the second half of this year but declines next year and

turns negative in 2013, before rebounding in the following years.

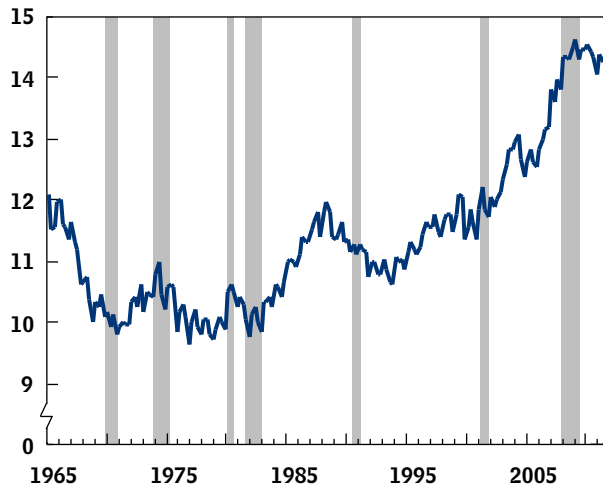
Wealth and Credit Conditions. CBO also projects that consumer spending will be lifted by a slow improvement in households' net worth (assets minus liabilities) and by a further easing of credit conditions. After falling by about 25 percent (nearly \$16 trillion) between the second quarter of 2007 and the first quarter of 2009, households' wealth has partially recovered, rising by about 18 percent (almost \$9 trillion) between the first quarter of 2009 and the first quarter of 2011. Most of that gain occurred in the value of corporate stocks held by households, although a small part of the gain came from a reduction in the amount owed on home mortgages and consumer loans, as borrowers paid down existing debt, refrained from taking on new debt, and in some cases defaulted on their obligations. Partially offsetting those changes was a continued decline in the value of households' real estate holdings as a result of falling house prices. The gains in households' net worth in the first part of this year have probably been eliminated, however, by the sudden drop in stock prices in late July and early August (see Box 2-1 on page 34). (The greater recent volatility of stock prices may also make consumers more cautious about spending in the coming months.)

House prices are nearing the end of their decline, in CBO's estimation. But they probably will not begin a sustained increase until the second half of 2012, when CBO expects there to be fewer foreclosures and distressed sales. CBO projects that by the end of 2013, house prices, as measured by the Federal Housing Finance Agency (FHFA) purchase-only price index, will be back to levels first reached in 2004 (see Figure 2-4). The Case-Shiller house price index, which differs from the FHFA index by including the prices of homes financed with mortgages that are not federally guaranteed, rose more than the FHFA index during the housing boom and has fallen more sharply since then. CBO projects that by the end of 2013, the Case-Shiller index will be back to 2003 levels.

Credit conditions for consumers are expected to keep improving slowly, although borrowing may not pick up noticeably until consumers become more confident about their employment and income prospects. According to a July survey by the Federal Reserve of senior loan officers at commercial banks, banks have continued to ease their lending standards and loan terms for consumers and have increased their willingness to make consumer loans this

Figure 2-5.**Vacant Housing Units**

(Percentage of total units)



Sources: Congressional Budget Office; Department of Commerce, Census Bureau.

Notes: Housing units comprise occupied units and vacant units, including units intended for year-round use and seasonal units.

Data are quarterly and are plotted through the second quarter of 2011.

year.¹¹ Nevertheless, banks are likely to remain more cautious in their lending than they were before the financial crisis—in part because the losses they are experiencing on consumer loans made in earlier years are still exceptionally high. The survey of loan officers also suggests that the demand for consumer loans has stopped declining.

The market for home mortgages remains dominated by the federal government, but that situation may be starting to change. Loans carrying government guarantees accounted for 95 percent of the mortgages issued in the first half of 2011, and the availability of residential mortgages that do not carry a federal guarantee—a market that funneled credit to riskier borrowers before the financial crisis—remains limited.¹² For mortgages with government guarantees, interest rates since the second half of 2010 have been at levels last seen in the 1960s, and CBO expects those rates to remain unusually low for the next

several years. Still, lending standards remain strict compared with those during the housing boom, and borrowers with credit histories that are less than stellar continue to have trouble obtaining credit. In addition, the bulk of mortgages without federal guarantees that were issued during the past few years are being held by banks; the practice of banks' converting pools of loans into private mortgage-backed securities and selling them, which flourished before the financial crisis, has yet to revive. Nevertheless, there are some signs of improvement in private mortgage lending, such as growth in originations of jumbo loans over the past several quarters—albeit still at low levels—and a noticeable narrowing of the difference in interest rates between jumbo and conforming loans.¹³

Housing Vacancies and Household Formation. In addition to problems in mortgage lending, another factor likely to slow the recovery of the housing market is the large number of vacant homes beyond the number that would be expected under normal market conditions. That excess supply of vacant homes has held down residential construction for the last few years. Roughly 2.2 million excess vacant housing units existed in the first half of 2011, CBO estimates—fewer units than a year ago but more than at any time prior to the recession, both in absolute terms and as a percentage of total housing units. The overall number of vacant units, which was already high before the recession because of overbuilding during the housing boom, partly reflects the large number of foreclosures and continued slow household formation since the recession ended (see Figure 2-5).

The recovery of the housing market has been dampened by the unusually low rate of household formation in the past few years. Household formation typically slows during periods of weakness in the labor market: When job prospects are poor, people may be more likely to live with relatives or friends. Between the second half of 2007 and the first half of 2011, an average of just 500,000 new

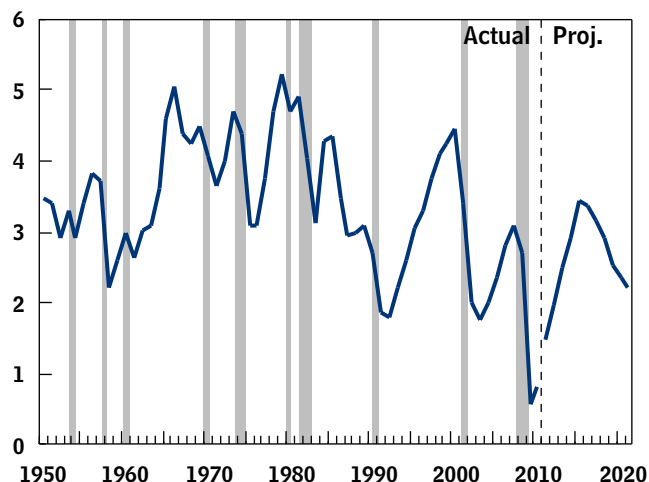
11. Board of Governors of the Federal Reserve System, *The July 2011 Senior Loan Officer Opinion Survey on Bank Lending Practices* (August 15, 2011), www.federalreserve.gov/boarddocs/slnloansurvey/201108/default.htm.

12. The availability of credit for residential mortgages without a federal guarantee decreased sharply in the wake of the financial crisis, triggered in part by falling house prices, and has not yet recovered. In contrast, government backing for Fannie Mae and Freddie Mac and the programs of agencies such as the Federal Housing Administration have ensured a steady supply of mortgage financing for borrowers who meet those organizations' qualifications.

13. Jumbo loans are mortgages that exceed the size limits set by the FHFA for conforming loans (those eligible for federal guarantees through Fannie Mae or Freddie Mac).

Figure 2-6.**Net Business Fixed Investment**

(Percentage of gross domestic product)



Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

Notes: Business fixed investment consists of businesses' spending on nonresidential structures, equipment, and software. It is shown here net of depreciation.

Data are annual. Actual data, which are plotted through 2010, incorporate the July 2011 revisions to the national income and product accounts; projections, which are plotted through 2021, are based on data issued before the revisions.

households were added each year, well below the 1.1 million annual average of the previous 10 years. The decrease in household formation has dampened not only homebuilding but also consumer spending, because formation of a new household is usually accompanied by spending on furniture, appliances, and other goods and services.

In CBO's projections, household formation returns to a more normal rate, and even exceeds it for a time, as the unemployment rate declines. Excess vacant units will gradually be occupied as new construction continues to fall short of the rate needed to keep pace with household formation. However, CBO expects that it will take about two years to work off the excess housing stock, which will restrain the growth of house prices and housing construction during that period.

The Business Sector

Business investment—spending on equipment, software, and nonresidential structures plus the change in business inventories—makes up only about 10 percent of GDP, but it accounted for about two-thirds of the growth of

real GDP in 2010. CBO projects that the growth of business investment will remain strong over the next few years. Investment in producers' durable equipment and software is forecast to increase at double-digit rates in both 2011 and 2012, following a rise of nearly 17 percent in 2010 (as measured from the fourth quarter of the previous year). Investment in nonresidential structures is recovering more slowly than investment in equipment and software, both because it takes longer to ramp up investment in structures than in equipment and because lending standards are tight for the commercial real estate sector. However, with vacancy rates for industrial structures and for office space having fallen since mid-2010, CBO expects investment in nonresidential structures to strengthen later this year. Investment in inventories, the category of investment that provided the most support for the growth of output earlier in the recovery, will probably provide less support this year and next year now that firms have rebuilt their stocks to more-normal levels.

The anticipated strong growth in business investment follows a steep decline in such investment during the recession. In 2009, net fixed investment by businesses (investment in equipment, software, and structures minus depreciation) was at its lowest level relative to GDP in more than half a century (see Figure 2-6). With so much idle industrial capacity and vacant commercial real estate, businesses had less need for investment than usual. In 2010, net fixed investment picked up a bit relative to GDP, but it remained well below its long-run historical average. The growth in GDP that CBO has projected for the near term will encourage businesses to boost net fixed investment to meet increases in demand for their products.

Continued improvement in domestic economic profits is also likely to support business investment, CBO projects.¹⁴ Domestic economic profits plummeted by 56 percent between the third quarter of 2006 and the fourth quarter of 2008, but they have grown rapidly since then and had nearly recovered to their prerecession peak by the end of 2010. CBO expects that the growth of profits will slow as the labor market recovers and that profits will increase more slowly than gross domestic income (the total income earned in the production of

14. Domestic economic profits are defined as corporations' domestic profits adjusted to remove distortions in depreciation allowances caused by tax rules and to exclude the effect of inflation on the value of inventories.

gross domestic product in the United States) during the next few years.

Conditions in financial markets will provide further support for business activity, in CBO's estimation. The interest rates paid by corporations have fallen to levels last seen almost 50 years ago. Corporations, including those with riskier credit ratings, have taken advantage of those historically low interest rates to refinance large amounts of debt; their lower interest payments have boosted profits. Moreover, the Federal Reserve's July survey of senior loan officers indicates that banks have been relaxing their standards and terms for commercial and industrial loans to large and medium-size firms since late 2009, and CBO expects that easing to continue in the coming year.

Although bank lending to small businesses has increased since mid-2009, it is still far below its prerecession level. The extent to which that situation results from constraints on the supply of loans versus lower demand for loans is hard to quantify. On the supply side, bank loans have recently become easier for small-business owners to obtain, but they remain less available than before the financial crisis because of strains on banks' capital and a tightening of underwriting criteria that has been only partly reversed. On the demand side, one survey found that a majority of small employers did not want credit or did not apply because they did not believe they could obtain it.¹⁵ Responses from another survey indicate that credit is not among the top three problems facing small businesses; rather, they are most concerned about poor sales, taxes, and government regulations.¹⁶

International Trade

CBO expects net exports to contribute to the growth of real GDP over the next two years. That projection mainly stems from CBO's forecast that economic growth will be weaker in the United States than among the nation's

trading partners, on average, and that the exchange value of the U.S. dollar—which declined sharply in the past two years—will remain low, keeping the relative prices of imports high for U.S. households and businesses and the relative prices of U.S. exports low for foreign buyers.

Economic Growth Abroad. In CBO's view, average growth among U.S. trading partners will slow down over the next two years but will remain faster than U.S. growth, primarily because growth in emerging economies will continue to be strong. A consensus of private forecasters expects economies in Asia (excluding Japan) to expand at an average rate of 7.5 percent in 2011 and 7.4 percent in 2012.¹⁷ That growth is slower than the 9.0 percent rate seen in 2010, partly because the central banks of several fast-growing emerging economies, such as China, have boosted interest rates in response to rising inflation.

Growth among other U.S. trading partners is likely to be subpar. In some of those nations (including Japan, the United Kingdom, and some members of the euro zone), growth fell noticeably in the first half of 2011, partly because of unexpected developments such as the earthquake and nuclear accident in Japan, the resulting interruption to global supply chains, and spikes in prices for oil and other commodities. Growth is likely to be weak in several other advanced economies, especially euro-zone countries (such as Greece, Ireland, Italy, Portugal, and Spain) where concerns about mounting government debt have pushed up interest rates significantly and prompted large cuts in government spending and increases in taxes. A consensus of private forecasters expects growth in the euro zone as a whole to be 1.9 percent this year and 1.5 percent next year and expects growth in Japan to be -0.7 percent in 2011 and 3.1 percent in 2012.

Exchange Value of the U.S. Dollar. CBO projects that the trade-weighted exchange value of the dollar will decline at a moderate pace, on average, over the next 10 years. That value fell for most of the past decade (see Figure 2-7) as international investors became less willing to keep adding to their increasingly large holdings of U.S. dollar assets. However, the value of the dollar turned sharply upward during the global financial crisis, when international investors purchased large amounts of U.S. Treasury

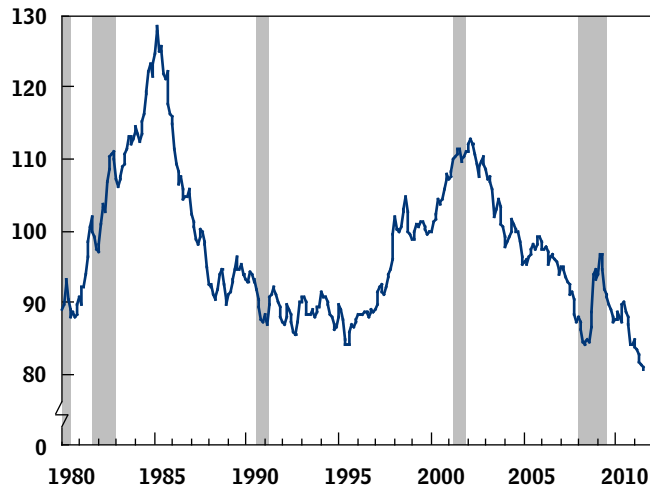
15. The survey defines a "small employer" as a business owner employing between 1 and 250 nonowners. See National Federation of Independent Business Research Foundation, *Financing Small Businesses: Small Business and Credit Access* (January 2011), www.nfib.com/Portals/0/PDF/AllUsers/research/studies/Small-Business-Credit-Access-NFIB.pdf.

16. Responses ranked credit at the bottom of a 10-item list. See William C. Dunkelberg and Holly Wade, *NFIB Small Business Economic Trends* (National Federation of Independent Business Research Foundation, July 2011), www.nfib.com/Portals/0/PDF/sbet/sbet201107.pdf.

17. Consensus Economics, *Consensus Forecasts and Asia Pacific Consensus Forecasts* (August 2011).

Figure 2-7.**Exchange Value of the U.S. Dollar**

(Index, March 1973 = 100)



Sources: Congressional Budget Office; Federal Reserve.

Notes: This index is an average of the U.S. dollar's exchange value against the currencies of a large group of major U.S. trading partners, adjusted for inflation and weighted by the amount of trade the United States conducts with each of those countries. The index weights change over time.

Data are monthly and are plotted through July 2011.

securities to reduce their exposure to volatile and falling prices of other assets. The value of the dollar declined again as the worst of the financial crisis passed, although that downward trend was temporarily interrupted in the first half of 2010 as concerns mounted about the growing indebtedness of several European governments.

So far this year, the dollar has dropped sharply even though the European debt crisis continues to unsettle international financial markets. That fall has prompted questions about whether the status of the dollar as a reserve currency and a safe haven in times of economic turmoil has diminished because of investors' concerns about rising U.S. government debt.¹⁸ However, other factors may have contributed to the dollar's drop this year, including the rise of foreign interest rates relative to U.S. interest rates, the sharp increase in oil prices, and the weak growth of the U.S. economy.

18. A reserve currency is accepted and held by central banks and other major financial institutions around the world as a means of paying international debt obligations.

The Labor Market

Labor market conditions deteriorated dramatically during the recession, and in spite of a modest recovery in job growth beginning in early 2010, employment remains well below its prerecession level. The pace of employment growth picked up briefly in early 2011, with the total number of jobs increasing at an average monthly rate of about 180,000 in the first four months of the year, more than double its average pace in 2010 (see Figure 2-8). However, employment growth has slowed again, averaging only 72,000 jobs per month from May through July. Likewise, the unemployment rate fell from 9.8 percent in November 2010 to 8.8 percent in March 2011, but by July it was back up to 9.1 percent.

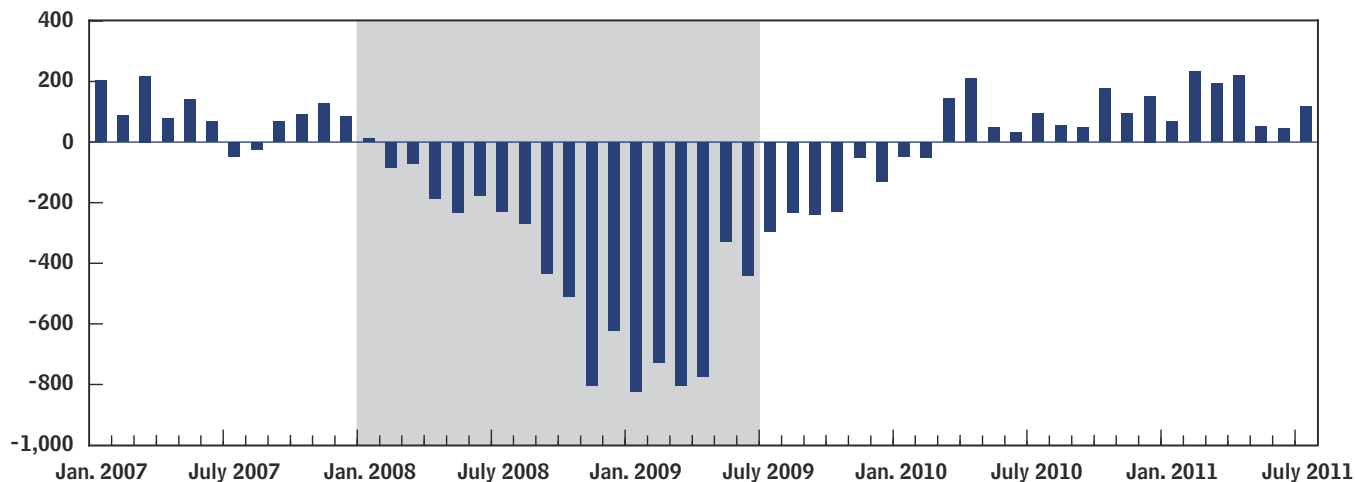
The rise in the unemployment rate during the recession and again more recently reflects several factors. Most of the increase has resulted from a cyclical decline in the demand for goods and services, and hence for workers, but some has reflected structural factors, such as a mismatch between the requirements of existing job openings and the characteristics of job seekers, including their skills and locations. Quantifying the relative importance of those factors is difficult. Nonetheless, as discussed below, CBO estimates that the rate of unemployment stemming from sources other than the business cycle is currently about 6 percent but that it will decrease to about 5¼ percent by 2017 as some of those structural factors fade.

Looking ahead, CBO's projection of moderate growth in employment depends primarily on its projection of moderate growth in output. In CBO's forecast, the number of jobs grows at an average annual rate of 1.8 percent (just over 200,000 jobs per month) between 2011 and 2016. Even so, the total number of jobs does not return to its prerecession peak until mid-2014. The unemployment rate is projected to edge down to 8.9 percent in the fourth quarter of 2011 and 8.5 percent in the fourth quarter of 2012. That decline stalls in 2013 as the growth of output slows sharply in response to the fiscal restraint scheduled under current law, and the unemployment rate is projected to rise to an average of 8.7 percent in that year. However, as the growth of output picks up after 2013 in CBO's forecast, the unemployment rate falls to 5.3 percent by the second half of 2016.

The creation of new jobs is probably hindered today not only by weak current demand for goods and services but also by some firms' lack of confidence in the

Figure 2-8.**Net Job Growth per Month**

(Thousands of jobs)



Sources: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics.

Note: Data are monthly and are plotted through July 2011. They exclude temporary jobs associated with the 2010 census.

sustainability of the economic expansion and by remaining constraints on access to credit for some firms. In addition, some businesses may be unsure and concerned about how they will be affected by the implementation of recently enacted financial and health care legislation, by the government's regulatory policies in other areas, and by possible future changes in federal tax and spending policies. However, the degree to which all of those factors may be restraining hiring is difficult to determine.

Cyclical and Structural Unemployment. CBO estimates that about 4 percentage points of the 5.1 percentage-point increase in the unemployment rate that occurred during and immediately after the recession can be attributed to a cyclical decline in aggregate demand for goods and services. (The unemployment rate rose from 5.0 percent in December 2007, when the recession began, to a peak of 10.1 percent shortly after June 2009, when the recession ended.) That cyclical component of unemployment will diminish as the economy continues to expand. In CBO's projections, cyclical unemployment fades away shortly after the gap between actual and potential output is closed in 2017. Once that has occurred, the unemployment rate is projected to equal its estimated natural rate during that period, 5.2 percent.

CBO estimates that the other roughly 1 percentage point of the rise in the unemployment rate during the recession

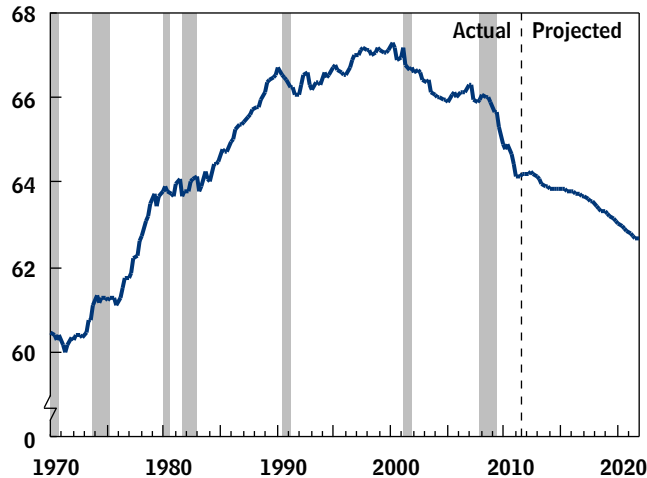
stemmed from structural factors. In CBO's estimates—which are necessarily inexact and are based on studies of labor market performance in the past as well as on studies of the effects of the recent recession—about a quarter of that 1 percentage point can be attributed to the direct effects of extended unemployment insurance (UI) benefits. Those extended benefits encouraged some jobless workers who would otherwise have dropped out of the labor force to remain in it in order to be eligible for benefits, and they may have induced others to search for work less intensively or to reject unsatisfactory job offers.¹⁹ With the availability of extended UI benefits scheduled to expire in early 2012 under current law, those effects will disappear shortly thereafter.

Roughly half of the 1 percentage-point rise attributable to structural factors reflects mismatches between the skills

19. Extended UI benefits have had several partially offsetting effects on the labor market. For example, they have boosted employment by increasing recipients' spending and thus increasing demand for goods and services in the economy as a whole; at the same time, they have reduced employment by diminishing recipients' incentive to work. In CBO's assessment, the net impact of those and other effects of extended UI benefits has been an increase in employment. For additional discussion, see the statement of Douglas W. Elmendorf, Director, Congressional Budget Office, before the Senate Committee on the Budget, *The Economic Outlook and Fiscal Policy Choices* (September 28, 2010), pp. 16–17.

Figure 2-9.**Labor Force Participation Rate**

(Percent)



Sources: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics.

Notes: The labor force participation rate is the percentage of the civilian noninstitutionalized population age 16 or older that is either working or actively looking for work.

Data are quarterly. Actual data are plotted through the second quarter of 2011; projections are plotted through the fourth quarter of 2021.

and locations of available unemployed workers and the needs of employers, CBO estimates. One important source of such mismatches is the decline in demand for construction workers that followed the collapse of the housing market.²⁰ The effect of mismatches on the unemployment rate is projected to diminish gradually over the next five years as people acquire new skills, or in some cases relocate to faster-growing regions, and as some older workers displaced during the recession leave the labor force.

The remaining roughly one-quarter of a percentage point reflects the difficulties that the long-term unemployed (people who have been jobless for at least six months) face in finding work. Those difficulties are likely to linger for some time.²¹ CBO projects that this effect will persist over the next 10 years; it accounts for an increase in CBO's current estimate of the natural rate of unemployment from 5.0 percent before the recession to 5.2 percent in the second half of the 10-year projection period.

Labor Force Participation, Other Measures of Weakness in the Labor Market, and Wages and Salaries. The labor force participation rate—the share of the civilian non-institutionalized population age 16 or older that is either working or actively seeking work—fell from 66.0 percent in 2007 to an average of 64.2 percent in the first half of 2011 (see Figure 2-9). Some of that decline reflects factors other than the downturn (such as the aging of the baby-boom generation). However, even with those factors removed, the estimated cyclical decline in that rate—both during and after the recession—is much larger than has been typical of past downturns. CBO projects that the rate of labor force participation will decrease to 63.7 percent by 2016, as the effects of the aging of the baby boomers and of increases in tax rates scheduled under current law more than offset the effects of stronger demand for labor from a recovery in output.²²

If labor force participation had not declined so much, the unemployment rate would have risen even more than it did and would be higher today.²³ For example, the number of unemployed workers who withdrew from the labor

20. Some analysts have suggested that problems in the housing market may also be contributing to structural unemployment by inhibiting mobility. In particular, homeowners with negative equity may be less likely to relocate to a better job market. See Fernando Ferreira, Joseph Gyourko, and Joseph Tracy, "Housing Busts and Household Mobility," *Journal of Urban Economics*, vol. 68, no. 1 (2010), pp. 34–45. However, research on migration patterns suggests that, at least through mid-2010, problems in the housing market have not inhibited the mobility of unemployed homeowners and that the migration rates of homeowners and renters have changed roughly in tandem. Moreover, homeowners may be even more willing to relocate as their home equity becomes more negative, because that reduces the possibility that their homes will ever be worth more than their mortgages. See Sam Schulhofer-Wohl, *Negative Equity Does Not Reduce Homeowners' Mobility*, Working Paper 682 (Federal Reserve Bank of Minneapolis, December 2010); and Daniel Aaronson and Jonathan Davis, "How Much Has House Lock Affected Mobility and the Unemployment Rate?" *Chicago Fed Letter* (September 2011).

21. For a broader discussion of the costs of job loss, see Congressional Budget Office, *Losing a Job During a Recession*, Issue Brief (April 2010).

22. See Congressional Budget Office, *CBO's Labor Force Projections Through 2021*, Background Paper (March 2011).

23. The unemployment rate is the number of jobless people who are available for work and who are actively seeking jobs, divided by the size of the labor force.

Figure 2-10.**Unemployed Workers per Job Opening**

(Number)



Sources: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics.

Note: Data are monthly and are plotted through June 2011.

force because they were discouraged about their job prospects increased markedly during and after the recession. Had those discouraged workers instead been counted as unemployed members of the labor force, the unemployment rate in July would have been 9.8 percent rather than 9.1 percent.

Other measures also show a great deal of weakness in the labor market. The number of unemployed workers per job opening averaged about $4\frac{1}{2}$ throughout the first half of 2011, down from an average of slightly over 6 in 2009 but still much higher than it was before the recession (see Figure 2-10). In addition, the number of people who are employed part time but want full-time work averaged about 8.5 million in the first half of 2011, slightly below the number in the previous two years but still nearly double the prerecession figure.

Likewise, the share of unemployed people who have been out of work for a long time is unusually high. On average, 44 percent of workers who were unemployed in the first half of 2011 had been jobless for more than six months. Moreover, in mid-2011, 31 percent of unemployed workers had been jobless for at least a year. Those rates of long-term unemployment are unprecedented in the post–World War II era. (By comparison, workers who had been jobless for more than six months accounted for

about 25 percent of all unemployed workers shortly after the 1981–1982 recession.)

The weakness in the labor market has taken a toll on compensation. Total real income from wages and salaries fell by more than 7 percent between early 2008 and early 2010. In the first half of 2011, it remained about 5 percent below its prerecession level and was barely growing. Those patterns are mostly attributable to weak job growth, but they also reflect slow growth in average hourly wages, which have failed to keep pace with inflation over the past two years. In CBO’s forecast, real wage and salary income grows at an average rate of a little under 4 percent a year between 2011 and 2016, reflecting the projected growth of employment and an average increase of about $1\frac{1}{2}$ percent per year in real hourly wages.

Inflation

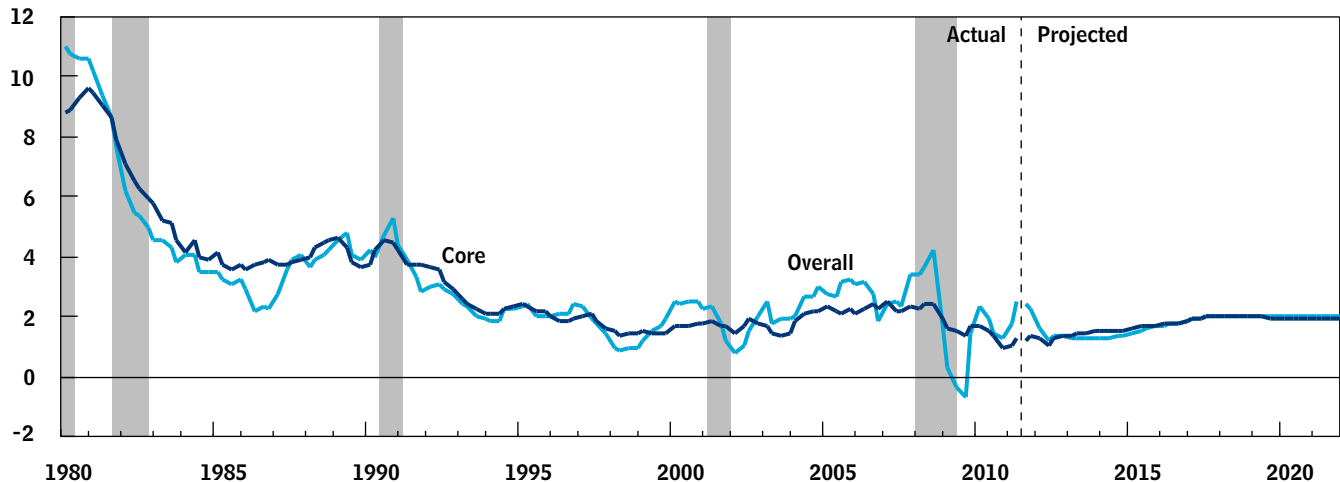
Although inflation increased in the first half of 2011, CBO projects that it will recede somewhat in the second half and that prices will rise at a subdued pace over the next few years. On the basis of the data available in early July, the PCE price index is forecast to increase by 2.4 percent in 2011 (as measured by the change from the fourth quarter of the previous year) and by only 1.3 percent in 2012. CBO projects that the core PCE price index—which excludes prices for food and energy—will increase by 1.7 percent in 2011 and 1.4 percent in 2012 (see Figure 2-11). The GDP price index will rise by 1.4 percent in 2011 and 1.3 percent in 2012, CBO projects, and the CPI-U and its core version will increase at the same rates as, or slightly higher rates than, their PCE counterparts.

A principal reason for the pickup in inflation earlier this year was a spike in the price of oil. That increase appears to have been a response primarily to political uncertainty and supply disruptions in the Middle East and North Africa. Other contributors to the rise in inflation this year include more-rapid increases in prices for food and rental housing as well as price increases stemming from disruptions to the production of motor vehicles because of the earthquake and nuclear accident in Japan.

Looking ahead, CBO does not expect the surge in energy and food prices earlier this year to persist beyond 2011. The benchmark price of crude oil rose from an average of about \$75 per barrel last summer to more than \$110 in late April; it then fell back below \$100 at the end of June

Figure 2-11.**Inflation**

(Percentage change in prices from previous year)



Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

Notes: The overall inflation rate is based on the price index for personal consumption expenditures; the core rate excludes prices for food and energy.

Data are quarterly. Actual data, which are plotted through the second quarter of 2011, incorporate the July 2011 revisions of the national income and product accounts. Projections, which are plotted through the fourth quarter of 2021, are based on data issued before the revisions.

and has continued to fall (see Figure 2-12). As a consequence, gasoline prices (measured on a seasonally adjusted basis) increased significantly between late 2010 and April 2011 but have since eased somewhat.

Because fluctuations in energy prices have had only a limited effect on core inflation in the past several decades, CBO expects that the recent rise in energy prices will have little impact on core inflation in the next few years.²⁴ Food prices began to increase in late 2010, mainly because of rising prices for agricultural commodities such as corn and wheat. Commodity prices have recently stabilized, however, and consistent with prices in futures markets, CBO expects the growth of food prices to slow over the next several months from the pace of the first half of 2011.

More important, CBO's forecast of subdued inflation over the next few years is based on the large amount of excess productive capacity (underused labor and capital

resources and vacant housing units) that exists in the economy. In particular:

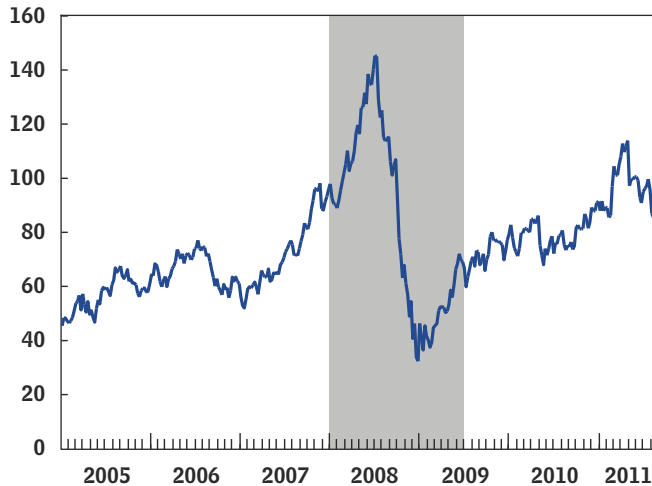
- The high rate of unemployment has dampened workers' ability to obtain increases in their wages and salaries, an important cost of business. In the second quarter of 2011, unit labor costs (wages and benefits per unit of output) in the nonfarm business sector were 2.5 percent lower than they were in the fourth quarter of 2008 because of a surge in productivity in 2009 and muted growth in hourly wages and benefits for the past few years. CBO expects wage growth to remain subdued for the next few years.
- The manufacturing sector was using about 75 percent of its capacity in the first half of 2011, up from a low of 64 percent in mid-2009 but below the prerecession figure of about 79 percent. Such a low rate of capacity utilization indicates that production shortages are unlikely to emerge and push prices up.

In CBO's projections, those factors are partly offset by increases in the prices of imported goods and services (excluding petroleum). Such increases will raise core

24. See Mark A. Hooker, "Are Oil Shocks Inflationary? Asymmetric and Nonlinear Specifications Versus Changes in Regime," *Journal of Money, Credit, and Banking*, vol. 34, no. 2 (May 2002), pp. 540–561.

Figure 2-12.**Crude Oil Prices**

(Dollars per barrel)



Sources: Congressional Budget Office; Bloomberg.

Notes: The price shown is the spot price of the West Texas Intermediate grade of crude oil delivered at Cushing, Oklahoma.

Data are prices at the end of each week and are plotted through August 12, 2011.

inflation in 2011, CBO projects. Import prices rose by about 2¾ percent in 2010, and CBO expects that the decline in the value of the U.S. dollar since mid-2010 and its projected further decline will boost import prices over the projection period.

By 2017, with the economy having reached its potential level, both overall and core inflation will stabilize at 2 percent as measured by the PCE price index, CBO projects. The Federal Reserve considers an inflation rate of about 2 percent (or slightly below) as measured by that index to be consistent with its mandate to maintain maximum employment and price stability.²⁵ Market and survey measures that gauge people's longer-term expectations for inflation have increased somewhat this year, but they have not reached levels that the Federal Reserve would consider a threat to price stability.

25. See Ben S. Bernanke, "Monetary Policy Objectives and Tools in a Low-Inflation Environment" (speech given at the Federal Reserve Bank of Boston's conference "Revisiting Monetary Policy in a Low-Inflation Environment," Boston, Mass., October 15, 2010), www.federalreserve.gov/newsevents/speech/bernanke20101015a.htm.

Some analysts have expressed concern that the large amount of excess bank reserves resulting from the Federal Reserve's asset purchases will raise inflation above 2 percent. The main worry appears to be that the Federal Reserve will be too slow to remove that extra liquidity, leading to excessive borrowing and spending. However, the Federal Reserve has several tools—including the federal funds rate and the interest rate paid on excess reserves—that, in CBO's view, will allow it to manage those reserves effectively.

Some Uncertainties in the Near-Term Economic Outlook

Economic forecasts are always subject to a considerable degree of uncertainty, but the uncertainty surrounding CBO's current forecast is especially great because the present business cycle has been unusual in a variety of ways. Following its usual practice, CBO constructed its current forecast to lie in the middle of the distribution of possible future outcomes for the economy, as CBO viewed them in early July. Actual outcomes will undoubtedly differ from CBO's forecast in at least some respects. Key areas of uncertainty in the economic outlook include the following factors:

- The degree to which households want to reduce their debt burdens further,
- The pace at which firms will hire and invest,
- The timing and magnitude of a recovery in house prices,
- Changes in stock prices and long-term interest rates,
- The resolution of concerns that some European governments may default on their debts, and
- The path of U.S. fiscal policy.

Different outcomes for those factors could combine to boost the growth of the U.S. economy significantly, to create a new recession, or to produce some result in between.

On the upside, the economy could grow considerably faster than CBO has forecast if the forces that have restrained the recovery fade more rapidly than CBO anticipates. The most important of those forces are the ones holding down consumer spending, including weak growth in employment and income as well as the loss of

wealth from declines in house and stock prices. If wages and salaries were to grow faster than CBO projects—for example, because of a shift in national income toward employee compensation and away from profits—then they could support stronger consumer spending. If that faster growth in compensation was matched by gains in house prices and a further easing of constraints on lending, then support for consumer spending could be buttressed by increased net worth and faster growth in consumer credit. Those conditions could in turn speed up the growth of employment and boost businesses' spending on plant and equipment, potentially leading to a self-reinforcing cycle of increased spending, hiring, and income.

That favorable chain of events could be bolstered by renewed stability in financial markets or declines in the prices of oil and other commodities. In addition, foreign demand for U.S. goods and services could exceed CBO's forecast if fears of negative financial repercussions from default on European sovereign debt proved to be exaggerated and if economic expansion in India, China, and other parts of the developing world ended up being stronger than expected.

However, outcomes that are considerably worse than CBO's forecast are also possible. The slowing of growth in U.S. output during the first half of 2011 might portend the onset of another recession. One possible path to a new recession would be a self-reinforcing downward spiral in which reduced hiring led to weaker growth of household income and diminished consumer and business confidence, which in turn led to lower spending by households and businesses and thus less need for workers and less hiring. Stock prices could continue to fall, reducing households' wealth and confidence. In addition, problems in housing and mortgage markets could persist longer than anticipated in CBO's forecast, which could push down house prices further, prolong problems in the financial system, and provide additional restraint on consumer spending and residential construction. Under those conditions, the income and confidence of businesses and households would decline further, and a cycle of self-reinforcing adjustments such as those described above could drive the economy into recession again.

Another possible catalyst for a recession is a worsening of the sovereign debt crisis in Europe, leading to further turmoil in international financial markets and potential spillover effects on U.S. financial markets. If that

occurred while policymakers in some developing countries were already slowing their economies to counteract inflationary pressures, a worldwide contraction in economic activity could ensue. The problems for the U.S. economy would be compounded if oil prices spiked upward because of further political unrest or military conflict in oil-producing states that threatened to disrupt the supply of oil.

The Outlook for 2017 Through 2021

In CBO's projections, economic output returns to its potential level by 2017 and grows at the same rate as potential output through 2021. In other words, the outlook for real GDP in that five-year period is based not on projections of cyclical movements in the economy but on trends in the factors that underlie potential output, such as growth in the labor force, the rate of capital accumulation, and improvements in productivity. Those projections take into account the predicted effects of the slow economic recovery on investment and of current-law fiscal policy on labor supply and capital accumulation. They also incorporate the assumption that the Federal Reserve will aim to keep inflation low and stable.

The growth of real GDP averages 2.4 percent a year between 2017 and 2021 in CBO's projections, and the unemployment rate averages 5.2 percent (the same as CBO's estimate of the natural rate of unemployment during that period). Both regular and core inflation as measured by the PCE price index average 2.0 percent over that five-year period; inflation as measured by the CPI-U is slightly higher (see Table 2-1 on page 33). The interest rates on 3-month Treasury bills and 10-year Treasury notes average 4.0 percent and 5.3 percent, respectively, during those years. By the end of the projection period, labor income as a share of gross domestic income (GDI) approaches, but remains below, its long-run historical average, and domestic economic profits as a share of GDI decline to a level slightly below their historical average.

Potential Output

Potential output will grow at an average annual rate of 2.4 percent during the 2017–2021 period, CBO projects (see Table 2-3). That figure is substantially lower than the average rate since 1950—3.3 percent—largely because CBO anticipates that the ongoing decline in the growth of the potential labor force (the labor force adjusted for movements in the business cycle) will continue during the next 10 years. In addition, CBO expects the growth

Table 2-3.**Key Assumptions in CBO's Projection of Potential Output**

(By calendar year, in percent)

	Average Annual Growth						Projected Average Annual Growth		
	1950-1973	1974-1981	1982-1990	1991-2001	2002-2010	Total, 1950-2010	2011-2016	2017-2021	Total, 2011-2021
Overall Economy									
Potential Output	3.9	3.2	3.1	3.2	2.4	3.3	2.3	2.4	2.3
Potential Labor Force	1.6	2.5	1.6	1.2	0.9	1.5	0.7	0.6	0.7
Potential Labor Productivity ^a	2.3	0.7	1.5	1.9	1.5	1.8	1.5	1.8	1.7
Nonfarm Business Sector									
Potential Output	4.0	3.5	3.3	3.5	2.7	3.6	2.7	2.8	2.8
Potential Hours Worked	1.4	2.2	1.7	1.2	0.5	1.4	0.6	0.6	0.6
Capital Services	3.8	4.3	4.1	4.7	2.6	3.9	3.5	3.8	3.6
Potential TFP	1.9	0.6	0.9	1.3	1.5	1.4	1.2	1.3	1.2
Potential TFP excluding adjustments	1.9	0.6	0.9	1.3	1.3	1.4	1.3	1.3	1.3
Total adjustments (Percentage points)	0	0	0	*	0.2	*	-0.1	0	**
Effects of the recession ^b	0	0	0	0	**	**	-0.1	0	**
Temporary adjustment ^c	0	0	0	*	0.2	*	0	0	0
Contributions to the Growth of Potential Output (Percentage points)									
Potential hours worked	0.9	1.6	1.2	0.8	0.4	0.9	0.4	0.4	0.4
Capital input	1.2	1.3	1.2	1.4	0.8	1.2	1.0	1.1	1.1
Potential TFP	1.9	0.6	0.9	1.3	1.5	1.4	1.2	1.3	1.2
Total Contributions	4.0	3.5	3.3	3.5	2.6	3.5	2.7	2.8	2.8
Potential Labor Productivity ^d	2.6	1.2	1.6	2.4	2.2	2.2	2.0	2.2	2.1

Source: Congressional Budget Office.

Notes: Actual and projected values for potential output and capital services do not reflect the July 2011 revisions to the national income and product accounts.

TFP = total factor productivity; * = between zero and 0.05 percentage points; ** = between -0.05 percentage points and zero.

- The ratio of potential output to the potential labor force.
- An adjustment to reflect the recession's effects on potential output beyond its impact on capital accumulation and labor supply.
- An adjustment for the unusually rapid growth of TFP between 2001 and 2003.
- The ratio of potential output to potential hours worked in the nonfarm business sector.

of services from capital and the growth of productivity to be slightly slower over the next decade than they have been, on average, since 1950.

In CBO's projection, growth of the potential labor force averages 0.7 percent annually during the 2011–2021 period, about half of the average growth rate since 1950 and a little below the average rate since 2002. The tempered pace in the coming decade stems from a projected further decline in labor force participation resulting primarily from the aging of the baby-boom generation. Policy changes incorporated in current law are also expected to slow the growth of the labor supply in the next 10 years. Those changes—which include the expiration of various tax cuts extended until 2012 or 2013 by the 2010 tax act—will raise marginal tax rates on personal income above those of the past decade and thus will modestly reduce people's incentive to work. In addition, CBO expects that the major health care legislation enacted last year will reduce the supply of labor slightly in the latter part of the decade.²⁶

Capital services, a measure of how much the stock of physical capital contributes to the flow of production, are projected to grow at an average rate of 3.6 percent a year in the 2011–2021 period—0.3 percentage points lower than the average growth rate since 1950 but a full percentage point higher than the average rate since 2002. Two major factors account for the lower projected growth in capital services relative to the long-term average. First, projected increases in federal debt are likely to displace some private capital investment. Second, the slower-than-average growth rate projected for the potential labor force means that smaller increases in the stock of plant and equipment will be needed to equip the workforce with the same amount of capital per worker, resulting in less business investment than would otherwise occur.

The growth rate of potential total factor productivity (average real output per unit of combined labor and capital services) in the nonfarm business sector averages 1.2 percent per year through 2021 in CBO's projections, compared with averages of 1.4 percent since 1950 and 1.5 percent since 2002. The growth rate of potential labor productivity (average real output per hour of labor)

in that sector is projected to be 2.1 percent annually through 2021.

Recessions in the United States typically have not had a significant influence on potential output beyond the direct effect of lower capital investment. However, some analysts have raised concerns about the impact of the recent recession on potential output because empirical studies have found that recoveries from recessions that stemmed from financial crises tend to be significantly more protracted than other recoveries.²⁷ Reflecting such studies and other analysis, CBO has incorporated some persistent effects of the recession into its projections of potential output. Taking into account effects on capital accumulation, potential hours worked, and potential total factor productivity, CBO projects that potential output will be about 2 percent lower, on average, between 2017 and 2021 than it would have been without the financial crisis and the recession (see Box 2-2).

Inflation, Unemployment, and Interest Rates

CBO's projections for the 2017–2021 period incorporate the assumption that the Federal Reserve will succeed in keeping the rate of inflation as measured by the PCE price index at about 2 percent. Inflation as measured by the CPI-U is slightly higher, 2.3 percent, over that period. The difference stems from the way in which changes in prices for individual goods and services are combined in each of the price indexes.

The average unemployment rate projected for the 2017–2021 period matches CBO's estimate of the natural rate of unemployment in that period, 5.2 percent. By comparison, CBO currently estimates that the natural rate of unemployment was 5.0 percent before the recession and is now about 6.0 percent (as discussed above). CBO expects that rate to remain higher through the end of the decade than it was before the recession because of the lingering difficulties that people who have experienced long-term unemployment will probably face in the labor market even after aggregate demand has fully recovered.

26. For details about the effects of that legislation on the labor market, see Congressional Budget Office, *The Budget and Economic Outlook: An Update* (August 2010), Box 2-1, pp. 48–49.

27. See, for example, Carmen M. Reinhart and Kenneth S. Rogoff, "The Aftermath of Financial Crises," *American Economic Review*, vol. 99, no. 2 (May 2009), pp. 466–472; and Carmen M. Reinhart and Vincent R. Reinhart, "After the Fall," in Federal Reserve Bank of Kansas City, *Macroeconomic Challenges: The Decade Ahead* (Kansas City: Federal Reserve Bank, 2011).

Box 2-2.**Persistent Effects of the Recent Recession on Potential Output**

The financial crisis that began in 2007 had a sharp impact on the U.S. economy, nearly freezing credit markets and pushing the economy into the most severe recession since World War II. International experience shows that downturns following financial crises tend to be more prolonged than other downturns, and the return to high employment tends to be slower.¹ In addition, because such recessions—more so than typical recessions—raise the level and duration of unemployment, reduce the number of hours that employees work, and dampen investment, they are more likely to reduce potential output for some time.

The Congressional Budget Office (CBO) projects that the recession will have a persistent impact on the quantity of productive capital. Investment plunged

during the recession because of a spike in financing costs and the decline in demand for goods and services. Although investment is currently on the rise—and CBO projects it to grow more strongly in the next few years—that rebound will probably not be enough by 2021 to offset all of the capital accumulation that was forgone during the recession and early recovery.

CBO also expects that the recession will have lingering effects on hours worked. The shortage of jobs relative to the number of job applicants has led some people to retire earlier than they might have otherwise or to leave the labor force in other ways (such as to receive disability benefits).² In addition, the high level of long-term unemployment will impede the recovery because when people are out of work—especially for a protracted period—their skills and connection to the workforce tend to erode and thus they may be unable or unwilling to pursue new job opportunities intensively. CBO has incorporated

1. See, for example, Carmen M. Reinhart and Kenneth S. Rogoff, “The Aftermath of Financial Crises,” *American Economic Review*, vol. 99, no. 2 (May 2009), pp. 466–472; and Carmen M. Reinhart and Vincent R. Reinhart, “After the Fall,” in Federal Reserve Bank of Kansas City, *Macroeconomic Challenges: The Decade Ahead* (Kansas City: Federal Reserve Bank, 2011).

2. Applications for disability benefits tend to rise in recessions. See Congressional Budget Office, *Losing a Job During a Recession*, Issue Brief (April 2010).

Continued

The interest rate on 3-month Treasury bills averages 4.0 percent between 2017 and 2021 in CBO’s projections, and the rate on 10-year Treasury notes averages 5.3 percent. Those interest rates reflect the projected rate of inflation during those years and CBO’s judgment about the likely real rate of return on capital in that period. Those rates are above the levels implied for the 2017–2021 period by current transactions in financial markets.

Income

Economic outcomes and federal tax revenues depend on how total income in the economy is divided among its constituent parts: wages and salaries, domestic economic profits, proprietors’ income, interest and dividend

income, and other categories. CBO forecasts various categories of income by projecting their shares of total gross domestic income. In principle, GDI equals GDP, but in practice they differ because of difficulties in measuring both aggregates.²⁸

Labor income has fallen sharply as a share of GDI since 2009 (see Figure 2-13). Much of the weakness of labor income has involved wages and salaries, which have

28. The national income and product accounts track the amount and composition of GDP, the prices of its components, and how the costs of production are distributed as income; the sum of those costs is GDI.

Box 2-2.**Continued****Persistent Effects of the Recent Recession on Potential Output**

those factors into its economic forecast: As a result, the levels projected for the potential labor force, potential employment, and potential hours worked through 2021 are slightly lower than CBO would have forecast in the absence of the recession, and the projected unemployment rate is higher.

The recession could also reduce the growth of potential total factor productivity (average real output per unit of combined labor and capital services) over the next five years by delaying the reallocation of resources to their most productive uses, slowing the rate at which workers gain new skills as technologies evolve, and curtailing businesses' spending on research and development. To account for the possibility of such effects, CBO has trimmed its estimate of the growth rate of potential total factor productivity by a small amount—0.1 percentage point a year between 2010 and 2014.

Combining estimates of the effects on capital accumulation, potential hours worked, and potential total factor productivity, CBO projects that potential output will be about 2 percent lower, on average, between 2017 and 2021 than it would have been

without the financial crisis and the recession. Slightly more than half of that effect is attributable to slower capital accumulation; the rest results from the smaller labor supply and lower total factor productivity, according to CBO's projections. Some researchers who have studied the impact of past recessions induced by financial crises report effects that large or larger, but other researchers report smaller persistent effects or none at all. Consensus does not yet exist about the magnitude of the long-term impact of financial crises.³

3. See, for example, European Commission, Directorate-General for Economic and Financial Affairs, *Impact of the Current Economic and Financial Crisis on Potential Output*, Occasional Paper 49 (Brussels: European Commission, June 2009); Davide Furceri and Annabelle Mourougane, *The Effect of Financial Crises on Potential Growth: New Empirical Evidence from OECD Countries*, Economics Department Working Paper 699 (Paris: Organisation for Economic Co-operation and Development, May 2009); and John H. Boyd, Sungkyu Kwak, and Bruce D. Smith, "The Real Output Losses Associated with Modern Banking Crises," *Journal of Money, Credit, and Banking*, vol. 37, no. 6 (December 2005), pp. 977–999.

grown more slowly than the other components of GDI in the past two years. In CBO's projections, labor income grows faster than GDI over the next decade, bringing its share from about 60 percent of GDI in early 2011 to about 61 percent, approaching its historical average since 1980.²⁹

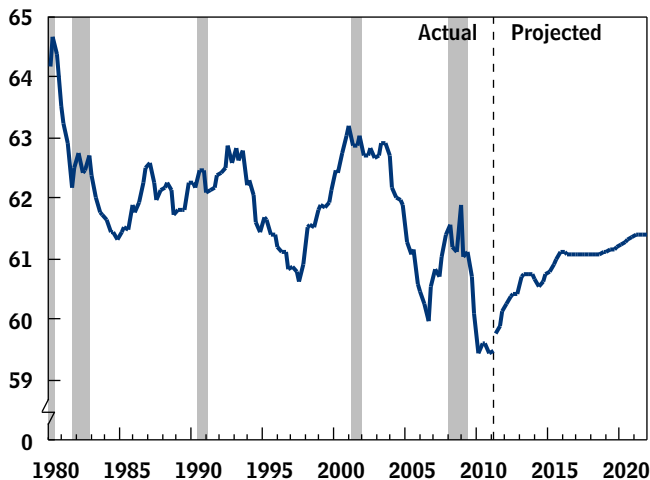
Domestic economic profits have rebounded sharply during the recovery from the recession. As a share of GDI, they fell from a 40-year high of 10.2 percent in 2006 to a low of 4.4 percent in late 2008. By early 2010, they had recovered to 9.5 percent. Both the decline and subsequent rebound of profits were particularly dramatic in the financial sector, but they were also apparent in the nonfinancial sector. In CBO's projections, profits' share of GDI declines modestly between now and 2021

because of higher interest rates (after 2013) and the rise in labor income's share of GDI.

29. Labor income's share of GDI has trended down since 1970, when it was about 65 percent. There is no consensus among analysts about why that has occurred, but several possible explanations have been offered. See, for example, Ann Harrison, "Has Globalization Eroded Labor's Share? Some Cross-Country Evidence" (draft, Department of Agricultural and Resource Economics, University of California at Berkeley, October 2002); Adreas Hornstein, Per Krusell, and Giovanni Violante, "Technology–Policy Interaction in Frictional Labor Markets," *Review of Economic Studies*, vol. 74, no. 4 (October 2007), pp. 1089–1124; and Anastasia Guscina, *Effects of Globalization on Labor's Share in National Income*, Working Paper 06/294 (International Monetary Fund, December 2006). For details about how CBO projects income shares, see Congressional Budget Office, *How CBO Forecasts Income*, Background Paper (August 2006).

Figure 2-13.**Labor Income**

(Percentage of gross domestic income)



Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

Notes: Labor income is defined here as labor compensation plus 65 percent of proprietors' income. Gross domestic income is the sum of all income earned in the production of gross domestic product.

Data are quarterly. Actual data, which are plotted through the first quarter of 2011, incorporate the July 2011 revisions of the national income and product accounts. Projections, which are plotted through the fourth quarter of 2021, are based on data issued before the revisions.

Comparison with CBO's January 2011 Economic Projections

Compared with its previous economic projections, which were published in January, CBO is now projecting significantly slower growth of real GDP in 2011 and slightly slower growth in 2012 (see Table 2-4). Most of that downward revision reflects data about developments in the first half of 2011 and CBO's expectation that the greater-than-expected weakness seen in consumption and investment will persist to some degree in the second half of the year.

CBO's projection of real GDP growth in 2013 is also lower than it was in January, mainly because of the additional fiscal restraint in that year that will stem from the Budget Control Act and because CBO has reevaluated the timing of the fiscal restraint that will stem from the expiration of tax provisions extended by the 2010 tax act.

However, the average annual growth rate for real GDP over the 2013–2016 period has been revised upward slightly because the economy is expected to recover from that 2013 setback and from the weaker growth projected for 2011 and 2012. For the latter half of the decade, CBO's projections of economic growth are a touch higher than they were in January, with a stronger outlook for private investment during the 10-year projection period (in the wake of the lower government borrowing expected to result from the new Budget Control Act) partly offset by technical revisions.

The unemployment rate in 2011 is now expected to be somewhat lower than CBO previously projected, following an unanticipated drop in that rate at the end of 2010 and during the first quarter of 2011. However, CBO's projections of the unemployment rate for 2012 through 2016 are higher than they were in January because of the weaker economic activity expected for the next several years. In the latter years of the projection period, the unemployment rate tracks the natural rate, which is unchanged from the January projections.

The forecast for inflation in 2011 is higher than it was January, reflecting the unexpectedly rapid rise in consumer prices that occurred during the first half of the year. Inflation during the rest of the projection period does not differ substantially between CBO's current and previous forecasts, however, because CBO expects that the large amount of unused resources in the economy will continue to restrain price increases.

Interest rates on 3-month Treasury bills and 10-year Treasury notes are lower in the current forecast than in the January forecast for the entire 2011–2021 period. Those differences largely reflect changes in financial markets' expectations between late 2010 and early July 2011 as well as the estimated effects of the enactment of the Budget Control Act.

Comparison with Other Forecasters' Economic Projections

CBO has also compared its current projections with the *Blue Chip* consensus forecast published in August and the Federal Reserve's forecasts from the June meeting of the Federal Open Market Committee. Differences between CBO's economic projections and those of other forecasters probably reflect a number of factors, including differences in the economic information that was

Table 2-4.

Comparison of CBO's Current and Previous Economic Projections for Calendar Years 2011 to 2021

	Forecast		Projected Annual Average	
	2011	2012	2013-2016	2017-2021
Fourth Quarter to Fourth Quarter (Percentage change)				
Real GDP				
August 2011	2.3	2.7	3.6	2.4
January 2011	3.1	2.8	3.4	2.4
Nominal GDP				
August 2011	3.8	4.0	5.2	4.5
January 2011	4.1	4.3	5.2	4.4
PCE Price Index				
August 2011	2.4	1.3	1.6	2.0
January 2011	1.2	1.3	1.7	2.0
Consumer Price Index ^a				
August 2011	2.8	1.3	1.7	2.3
January 2011	1.3	1.3	2.0	2.3
GDP Price Index				
August 2011	1.4	1.3	1.6	2.0
January 2011	0.9	1.4	1.8	2.0
Employment Cost Index ^b				
August 2011	2.2	2.9	3.4	3.5
January 2011	1.7	2.4	3.0	3.4
Real Potential GDP				
August 2011	2.0	2.0	2.5	2.4
January 2011	2.0	2.0	2.4	2.4
Calendar Year Average				
Unemployment Rate (Percent)				
August 2011	8.9	8.7	7.0	5.2
January 2011	9.4	8.4	6.4	5.2
Interest Rates (Percent)				
Three-month Treasury bills				
August 2011	0.1	0.1	1.5	4.0
January 2011	0.3	1.1	3.6	4.4
Ten-year Treasury notes				
August 2011	3.3	3.2	4.1	5.3
January 2011	3.4	3.8	4.7	5.4
Tax Bases (Percentage of GDP)				
Wages and salaries				
August 2011	43.5	44.1	44.5	45.2
January 2011	44.1	44.6	44.8	45.1
Domestic economic profits				
August 2011	8.6	8.5	8.3	7.3
January 2011	8.6	8.5	8.1	7.1

Source: Congressional Budget Office.

Note: GDP = gross domestic product; PCE = personal consumption expenditures.

a. The consumer price index for all urban consumers.

b. The employment cost index for wages and salaries of workers in private industry.

Table 2-5.**Comparison of Economic Projections by CBO, the *Blue Chip* Consensus, and the Federal Reserve**

(By calendar year)

	2011	2012	2013	Longer Run ^a
Fourth Quarter to Fourth Quarter (Percentage change)				
Real GDP				
CBO	2.3	2.7	1.5	2.3
<i>Blue Chip</i>	1.6	2.7	n.a.	n.a.
Federal Reserve				
Range	2.5 to 3.0	2.2 to 4.0	3.0 to 4.5	2.4 to 3.0
Central tendency	2.7 to 2.9	3.3 to 3.7	3.5 to 4.2	2.5 to 2.8
PCE Price Index				
CBO	2.4	1.3	1.3	2.0
Federal Reserve				
Range	2.1 to 3.5	1.2 to 2.8	1.3 to 2.5	1.5 to 2.0
Central tendency	2.3 to 2.5	1.5 to 2.0	1.5 to 2.0	1.7 to 2.0
Core PCE Price Index ^b				
CBO	1.7	1.4	1.4	2.0
Federal Reserve				
Range	1.5 to 2.3	1.2 to 2.5	1.3 to 2.5	n.a.
Central tendency	1.5 to 1.8	1.4 to 2.0	1.4 to 2.0	n.a.
Consumer Price Index ^c				
CBO	2.8	1.3	1.3	2.3
<i>Blue Chip</i>	3.2	2.2	n.a.	n.a.
GDP Price Index				
CBO	1.4	1.3	1.4	2.0
<i>Blue Chip</i>	2.1	1.9	n.a.	n.a.

Continued

available when various forecasts were completed, differing assumptions about fiscal policy (CBO's projections are based on current law), and variations in the economic and statistical models used by different forecasters. The *Blue Chip* consensus, which is based on a survey conducted in early August, probably reflects the weaker economic data published by the Bureau of Economic Analysis in late July (see Box 2-1 on page 34). The Federal Reserve's forecasts—which are reported as both a range (consisting of forecasts by the members of the Board of Governors and the presidents of the Federal Reserve Banks) and a central tendency (the range excluding the three highest and three lowest projections)—do not reflect any developments since late June.

CBO's projection of real GDP growth in 2011 is higher than that of the *Blue Chip* but lower than that of the

Federal Reserve (see Table 2-5). For 2012, CBO's projection of growth in real GDP is the same as the *Blue Chip* consensus and lower than the low end of the Federal Reserve's central tendency.

CBO's projections of the unemployment rate are slightly lower than the *Blue Chip* forecast for the fourth quarter of 2011 but the same as the *Blue Chip* for the fourth quarter of 2012. For both years, the unemployment rate in CBO's projection is at or a little above the high end of the central tendency of the Federal Reserve's forecasts.

CBO's projections of inflation are significantly lower than the *Blue Chip* forecasts but are close to the Federal Reserve's forecasts. Compared with CBO, some *Blue Chip* forecasters may estimate that potential output is lower, which would imply that less spare capacity exists

Table 2-5.

Continued

Comparison of Economic Projections by CBO, the *Blue Chip* Consensus, and the Federal Reserve

(By calendar year)

	2011	2012	2013	Longer Run ^a
	Fourth-Quarter Level (Percent)			
Unemployment Rate				
CBO	8.9	8.5	8.7	5.2
<i>Blue Chip</i>	9.0	8.5	n.a.	n.a.
Federal Reserve				
Range	8.4 to 9.1	7.5 to 8.7	6.5 to 8.3	5.0 to 6.0
Central tendency	8.6 to 8.9	7.8 to 8.2	7.0 to 7.5	5.2 to 5.6
Interest Rates				
Three-month Treasury bills				
CBO	0.1	0.2	0.3	4.0
<i>Blue Chip</i>	0.1	0.8	n.a.	n.a.
Ten-year Treasury notes				
CBO	3.2	3.3	3.4	5.3
<i>Blue Chip</i>	3.1	3.8	n.a.	n.a.

Sources: Congressional Budget Office; Aspen Publishers, *Blue Chip Economic Indicators* (August 10, 2011); Board of Governors of the Federal Reserve System, "Economic Projections of Federal Reserve Board Members and Federal Reserve Bank Presidents, June 2011" (June 22, 2011), www.federalreserve.gov/monetarypolicy/files/fomcproptabl20110622.pdf.

Note: The *Blue Chip* consensus is the average of about 50 forecasts by private-sector economists. The range of estimates from the Federal Reserve reflects the forecasts of the members of the Board of Governors and the presidents of the Federal Reserve Banks. The central tendency is that range with the three highest and three lowest projections omitted.

The *Blue Chip* consensus does not provide forecasts of the PCE or core PCE price index. The Federal Reserve does not provide forecasts of the consumer price index, the GDP price index, or interest rates.

GDP = gross domestic product; n.a. = not applicable; PCE = personal consumption expenditures.

- a. For CBO, values are for 2021. For the Federal Reserve, values represent assessments of the rate that each variable would be expected to converge on under appropriate monetary policy and in the absence of further shocks to the economy.
- b. Excludes prices for food and energy.
- c. The consumer price index for all urban consumers.

in the economy, and they may put less weight on the extent to which excess capacity can keep prices from rising.

CBO's projections of interest rates are very similar to those of the *Blue Chip* consensus for 2011 but significantly lower for 2012. (The Federal Reserve does not publish forecasts of interest rates.) CBO projects average

interest rates on 3-month Treasury bills of 0.1 percent in the fourth quarter of 2011 and 0.2 percent in the fourth quarter of 2012, whereas *Blue Chip* forecasts rates of 0.1 percent in 2011 and 0.8 percent in 2012. Interest rates on 10-year Treasury notes average 3.2 percent in 2011 and 3.3 percent in 2012 in CBO's projections, compared with the *Blue Chip* consensus forecast of 3.1 percent in 2011 and 3.8 percent in 2012.

Changes in CBO's Baseline Since March 2011

The Congressional Budget Office (CBO) anticipates that in the absence of further legislation affecting spending and revenues, the deficit for 2011 will be nearly \$1.3 trillion, \$116 billion lower than CBO projected in March, when the agency completed its previous baseline projections (see Table A-1).¹ For the 2012–2021 period, CBO now projects that the cumulative deficit will be about \$3.3 trillion lower than it anticipated in March. CBO's updated baseline projections reflect three categories of changes: the effects of legislation enacted since March, revisions to CBO's economic forecast, and technical changes (adjustments that do not stem from changes in legislation or new economic projections).² Of the total revision to deficits over the next 10 years, about \$2.1 trillion stems from enactment of the Budget Control Act of 2011 (Public Law 112-25) and \$1.2 trillion stems from other changes, mostly related to CBO's new economic forecast.

For 2011, CBO now estimates that revenues will be \$84 billion (4 percent) higher and outlays \$32 billion (1 percent) lower than it had previously estimated. The increase in projected revenues stems primarily from the larger-than-anticipated collections of individual income

taxes that resulted when 2010 tax returns were filed. The drop in projected outlays for the current year is the net result of a number of relatively small revisions, mostly technical changes to estimates of spending for mandatory programs.

In CBO's new baseline, revenues are higher and outlays are lower for most years in the 2012–2021 period than CBO previously projected. However, even though the deficit projections include \$1.2 trillion in savings from provisions related to the Joint Select Committee on Deficit Reduction, which was created by the Budget Control Act, the separate projections of revenues and outlays do not reflect those deficit reductions because it is unclear what specific changes in policy will ultimately achieve the lower deficits. If the automatic cuts specified in the act are implemented, they will apply only to spending; but legislation originating with the deficit reduction committee, if enacted, also could affect revenues, and CBO has no basis for allocating the targeted savings between those two components of the budget. Other than the effects of the Budget Control Act, most of the change in estimated deficits stems from revisions to CBO's economic forecast. Most important, a reduction in projected interest rates directly lowered interest costs in the baseline by more than \$600 billion over the 10-year period.

Legislative Changes

CBO estimates that implementation of the Budget Control Act will reduce deficits by \$2.1 trillion over the 2012–2021 period.³ In addition, CBO estimates that other legislation enacted since the agency prepared its March baseline will increase the 2011 deficit by \$3 billion but will reduce the cumulative deficit over the

1. Those projections were reported in Congressional Budget Office, "Preliminary Analysis of the President's Budget for 2012," attachment to a letter to the Honorable Daniel K. Inouye (March 18, 2011), and in *An Analysis of the President's Budgetary Proposals for Fiscal Year 2012* (April 2011).
2. CBO constructs its baseline in accordance with provisions of the Balanced Budget and Emergency Deficit Control Act of 1985 and the Congressional Budget and Impoundment Control Act of 1974. To project revenues and mandatory spending, CBO assumes that current laws, with only a few exceptions, will remain unchanged. To project discretionary spending, CBO assumes that future appropriations will adhere to the caps set in the Budget Control Act of 2011. The resulting baseline projections are not intended to be a prediction of future budgetary outcomes; rather, they serve as a benchmark that lawmakers can use to measure the potential effects of spending or revenue proposals.

3. See Congressional Budget Office, letter to the Honorable John A. Boehner and the Honorable Harry Reid estimating the impact on the deficit of the Budget Control Act of 2011 (August 1, 2011).

Table A-1.**Changes in CBO's Baseline Projections of the Deficit Since March 2011**

(Billions of dollars)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total	
												2012-2016	2012-2021
Total Deficit as Projected in March 2011	-1,399	-1,081	-692	-513	-538	-635	-590	-585	-665	-710	-729	-3,459	-6,737
Legislative Changes													
Changes to Revenue Projections													
Individual income taxes	0	*	-2	-2	-1	-1	-1	-1	-1	-1	-1	-7	-11
Social insurance taxes	0	0	0	*	*	*	-1	-1	-1	-1	-1	-1	-4
Corporate income taxes	0	*	-1	*	*	*	-1	-1	-1	-1	-1	-2	-5
Other	0	0	0	0	*	*	*	*	*	*	*	*	1
All Revenues	0	0	-3	-2	-2	-2	-2	-2	-2	-2	-2	-10	-19
Changes to Outlay Projections													
Mandatory outlays	*	6	5	2	-4	-5	-6	-5	-5	-6	-6	4	-24
Discretionary outlays	3	-27	-55	-70	-79	-87	-95	-103	-112	-120	-128	-320	-878
Debt service	0	*	-1	-2	-4	-8	-14	-21	-27	-35	-43	-15	-155
All Outlays	3	-21	-51	-70	-87	-101	-115	-129	-144	-160	-177	-331	-1,058
Changes Related to the Joint Select Committee on Deficit Reduction ^a													
Policy changes ^b	0	0	111	111	111	111	111	111	111	111	111	446	1,003
Debt service ^b	0	0	1	3	6	12	20	27	35	42	50	23	197
All Changes Related to the Committee^b	0	0	113	115	118	124	132	139	146	154	161	469	1,200
Total Legislative Changes^b	-3	21	160	183	203	223	245	266	289	312	337	790	2,239
Economic Changes													
Changes to Revenue Projections													
Individual income taxes	-2	-18	-45	-51	-21	*	14	21	25	26	23	-137	-29
Social insurance taxes	-5	-10	-21	-24	-10	1	7	8	8	9	9	-64	-24
Corporate income taxes	14	6	-11	-3	15	16	8	6	14	17	13	24	83
Other	2	14	26	22	8	-2	-6	-8	-10	-12	-14	69	19
All Revenues	10	-8	-51	-55	-8	15	23	26	36	40	32	-108	49
Changes to Outlay Projections													
Mandatory outlays													
Social Security	0	9	13	11	7	4	2	1	1	2	2	44	52
SNAP	*	*	*	3	3	3	3	3	2	2	2	9	20
Student loans	*	-1	-4	-4	-3	-2	-1	*	*	*	*	-15	-15
Medicaid	-1	*	1	3	3	2	1	1	1	1	2	9	15
Unemployment compensation	-4	*	4	6	2	-1	1	*	*	*	*	12	12
Other	*	4	6	7	5	3	1	*	-1	-2	-2	24	20
Subtotal, mandatory	-4	11	20	25	17	9	7	4	3	3	4	83	104
Net interest outlays													
Debt service	*	*	*	*	-1	-5	-10	-15	-19	-24	-29	-6	-103
Effects of rates and inflation	7	-16	-52	-96	-110	-100	-75	-56	-47	-43	-39	-373	-634
Subtotal, net interest	7	-16	-52	-96	-111	-105	-85	-71	-67	-67	-68	-379	-738
All Outlays	3	-5	-31	-71	-94	-96	-78	-67	-63	-64	-64	-297	-634
Total Economic Changes^b	7	-4	-20	15	86	110	101	93	100	104	96	188	683

Continued

Table A-1.

Continued

Changes in CBO's Baseline Projections of the Deficit Since March 2011

(Billions of dollars)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total	
												2012-	2012-
												2016	2021
Technical Changes													
Changes to Revenue Projections													
Individual income taxes	93	100	41	50	44	29	18	14	14	11	7	264	329
Social insurance taxes	3	-8	-10	-11	-14	-15	-18	-18	-18	-16	-16	-57	-144
Corporate income taxes	-24	-5	4	7	6	1	-2	-3	-2	-2	-1	13	2
Other	1	-1	*	-6	-3	-6	-2	-3	-3	-3	-1	-16	-28
All Revenues	74	86	36	40	33	9	-5	-10	-9	-10	-11	203	159
Changes to Outlay Projections													
Mandatory outlays													
Social Security	-1	-1	*	1	2	3	4	5	6	7	8	6	36
Health care programs	-11	-3	1	-2	-2	-4	-5	-6	-7	-4	-4	-10	-35
Unemployment compensation	*	-4	-5	-5	-2	-1	-1	-1	-1	-1	-1	-17	-23
Other	-16	8	6	1	3	3	1	1	2	2	2	21	29
Subtotal, mandatory	-28	1	2	-4	1	*	-1	-1	*	4	5	*	7
Discretionary outlays	-11	-2	-1	*	-1	*	-1	-2	-2	-2	-2	-4	-13
Net interest outlays													
Debt service	*	-3	-4	-7	-12	-17	-19	-21	-23	-25	-26	-43	-157
Other	2	*	-1	2	*	2	3	-1	-2	-4	-6	3	-7
Subtotal, net interest	1	-3	-6	-6	-12	-14	-17	-22	-24	-29	-32	-40	-164
All Outlays	-38	-4	-5	-10	-11	-14	-19	-25	-27	-27	-29	-44	-170
Total Technical Changes^b	112	90	40	50	44	23	14	15	18	17	18	247	329
All Changes													
Total Impact on the Deficit^b	116	108	181	248	333	356	360	374	406	433	450	1,227	3,250
Total Deficit as Projected in August 2011	-1,284	-973	-510	-265	-205	-278	-231	-211	-259	-277	-279	-2,232	-3,487
Memorandum:													
Total Impact on the Deficit ^b													
Revenues	84	77	-18	-17	23	21	16	14	25	28	18	86	189
Outlays	32	30	87	151	193	211	212	221	235	251	271	672	1,861
Changes Related to the Joint Select Committee on Deficit Reduction ^a	0	0	113	115	118	124	132	139	146	154	161	469	1,200

Source: Congressional Budget Office.

Note: * = between -\$500 million and \$500 million; SNAP = Supplemental Nutrition Assistance Program.

a. CBO has allocated the deficit reduction (apart from debt-service savings) evenly from 2013 through 2021. The actual composition of such deficit reduction over time and across budget categories will depend on the specific provisions of any legislation stemming from proposals of the Joint Select Committee on Deficit Reduction, created by the Budget Control Act of 2011 (Public Law 112-25), and the extent of any automatic reductions that would be triggered.

b. Negative numbers indicate an increase in the deficit; positive numbers represent a decrease in the deficit.

2012–2021 period by \$144 billion. Those additional changes primarily reflect the enactment of full-year appropriations for fiscal year 2011 (enacted in April, shortly after CBO had completed its previous baseline estimates).

Changes in Projected Deficits Related to the Deficit Reduction Committee

The Budget Control Act created a Joint Select Committee on Deficit Reduction to propose further deficit reductions totaling at least \$1.5 trillion over 10 years.⁴ The act also specified procedures for automatically reducing spending by as much as \$1.2 trillion if legislation originating with the new deficit reduction committee does not achieve at least \$1.2 trillion in savings. CBO has incorporated that amount of deficit reduction (which includes savings in debt-service costs) in its baseline but has no basis for allocating that amount between revenues and outlays.⁵

Changes to Projections of Outlays

As a result of legislation enacted since March, CBO has boosted its estimate of outlays for 2011 by \$3 billion but decreased its cumulative projection for the 2012–2021 period by \$1.1 trillion (excluding the effects of provisions in the Budget Control Act related to the deficit reduction committee). Nearly all of that decline results from anticipated reductions in discretionary spending and the associated debt-service savings.

Discretionary Spending. Before the Budget Control Act was enacted, the final appropriations in the Department of Defense and Full-Year Continuing Appropriations Act (P.L. 112-10) had reduced funding for 2011 relative to the temporary funding CBO used as the basis for constructing its previous baseline. As compared with that baseline, P.L. 112-10 reduced discretionary budget authority for 2011 by \$23 billion. Nondefense funding was decreased by nearly \$25 billion, whereas funding for defense programs was increased by \$2 billion. The largest reductions in funding were made to high-speed rail programs (\$3 billion), the Census Bureau (\$2 billion),

the Public Health and Social Services Emergency Fund (\$2 billion), and grants to state and tribal governments (\$1 billion).

As a result of P.L. 112-10, total discretionary outlays in 2011 will be \$3 billion higher, CBO estimates. That figure reflects an increase of nearly \$8 billion for defense programs, which is partially offset by a net reduction of \$4 billion in other spending. (Part of the reason that total outlays will increase this year as a result of that legislation is that some defense funding was shifted from slower-spending to faster-spending activities.)

CBO estimates that if appropriations in subsequent years were to equal the funding provided in 2011 (with adjustments made to reflect the effects of inflation), total discretionary budget authority over the 2012–2021 period would be \$183 billion less and discretionary outlays would be \$122 billion less than the amounts projected in the March baseline.

Subsequent to the enactment of P.L. 112-10, the Budget Control Act established caps on new discretionary appropriations over the 2012–2021 period. If appropriations in the next 10 years are equal to those caps, CBO estimates that the law—apart from the provisions related to the deficit reduction committee—will reduce discretionary spending by \$756 billion between 2012 and 2021 relative to the March baseline adjusted to incorporate the effect of the full-year appropriations discussed above. (See Box 1-1 on page 6 for more details on the Budget Control Act.) In total, CBO estimates, the two pieces of legislation will decrease outlays for discretionary programs by an estimated \$878 billion over the 10-year period.

Mandatory Spending. The enactment of recent legislation had much smaller effects on CBO's projections of mandatory spending, reducing outlays by \$24 billion over the 2012–2021 period. Much of the impact of legislative changes stemmed from enactment of the Comprehensive 1099 Taxpayer Protection and Repayment of Exchange Subsidy Overpayments Act of 2011 (P.L. 112-09), which will affect the net amount of subsidies for health insurance premiums purchased through health insurance exchanges starting in 2014. In that year, qualified taxpayers will become eligible to receive refundable tax

4. See Budget Control Act of 2011, P.L. 112-25, section 401(b)(2).

5. As used in *The Budget and Economic Outlook*, “debt service” refers to a change in interest payments resulting from a change in projected deficits.

credits to assist in the purchase of health insurance through the exchanges.⁶ The amount of those premium assistance credits will be based on family size and income, and the advance payments of the credits will be based on income estimated from tax returns for prior years. If taxpayers' circumstances change to the extent that their advance payments exceed the refundable tax credits to which they are entitled, they may be required to repay some or all of the credits, subject to certain limits based on income. P.L. 112-09 generally raises those limits, which is expected to reduce the number of people who apply for premium assistance credits. Among individuals who continue to apply for and receive such credits, some will update their income information to reduce overpayments while others may end up repaying more as a result of the new law. CBO and the staff of the Joint Committee on Taxation estimate that this provision will reduce net outlays for premium assistance credits and cost-sharing subsidies by \$20 billion over the 2012–2021 period. (The provision will also increase revenues by about \$5 billion over the same period.)

Together, enactment of the full-year appropriations act and the Budget Control Act had the effect of reducing CBO's projections of spending for mandatory education programs by \$5 billion over the 2012–2021 period. P.L. 112-10 made changes to the Pell Grant program that had significant, yet nearly offsetting, effects on CBO's projections of spending for that program over the 10-year period.⁷ The law eliminated a provision that permitted students to receive more than one Pell grant in a single award year. CBO projects that the elimination of that provision will reduce the cost of the mandatory portion of the Pell Grant program by approximately \$8 billion over the 2012–2021 period. At the same time, the legislation provided an additional \$8 billion to supplement the

portion of the Pell Grant program that is funded through annual discretionary appropriations.⁸

The Budget Control Act also made changes to education programs: The law amended the Higher Education Act of 1965 to appropriate additional funds for the Pell Grant program and made two changes to the federal government's student loan programs. The Budget Control Act directly appropriated \$10 billion for fiscal year 2012 and \$7 billion for fiscal year 2013 for Pell grants. Those funds will be used to supplement the portion of the Pell Grant program that is provided through annual discretionary appropriations. That provision will increase spending by \$17 billion between 2012 and 2015 (with no impact on outlays after 2015), CBO estimates.

In addition, the Budget Control Act eliminated the interest subsidy on subsidized student loans for most graduate students while the borrower is in school, in the post-school grace period, and during any authorized deferment period. It also terminated most of the Secretary of Education's authority to make incentive payments to borrowers to encourage prompt repayment of federal loans. CBO estimates that those changes will reduce direct spending by \$22 billion over the 2012–2021 period.

Net Interest. On net, changes to CBO's baseline projections for revenues and noninterest outlays that stem from the effects of new legislation (excluding provisions related to the deficit reduction committee) decrease the estimate of the 10-year cumulative deficit by about \$900 billion. Consequently, CBO has lowered its projection of outlays for net interest by \$155 billion for the same period.

Changes to Projections of Revenues

As a result of legislative changes, mostly attributable to the enactment of the Comprehensive 1099 Taxpayer Protection Act, CBO has reduced its projection of revenues over the 2012–2021 period by \$19 billion, on net. The law repealed the scheduled expansion in 2012 of the information that businesses would have been required to report to the Internal Revenue Service (IRS) on

6. Tax credits reduce a taxpayer's overall tax liability; if a refundable credit exceeds that liability, the excess may be refunded to the taxpayer, in which case the payment is recorded as an outlay in the budget.

7. In addition, the Department of Defense and Full-Year Continuing Appropriations Act of 2011 repealed the Free Choice Voucher program established under section 10108 of the Patient Protection and Affordable Care Act of 2010, which provided a mechanism through which certain employees could use their employer's insurance contribution to purchase a plan through the health insurance exchanges. That legislation will not affect outlays but will generate an estimated \$0.4 billion in revenues over the 2012–2021 period.

8. Under current law, the majority of funding for Pell grants is discretionary, provided through the annual appropriation process. That total amount, however, is supplemented by additional mandatory funding as determined by a formula specified in the Higher Education Act of 1965. For example, in fiscal year 2011, the maximum Pell Grant award per student from discretionary funds is \$4,860; an additional \$690 can be provided from mandatory funds, for a maximum total award of \$5,550.

Form 1099. It also repealed, starting in 2011, a provision of law that would have required more recipients of rental income to provide certain information about their expenses to the IRS. CBO and the staff of the Joint Committee on Taxation estimate that those provisions will reduce revenues by \$25 billion from 2012 to 2021. In addition, the provisions of P.L. 112-09 dealing with the refundable tax credits for the purchase of health insurance are expected to increase revenues by \$5 billion over the 2014–2021 period (and reduce outlays by \$20 billion).

Economic Changes

CBO's latest economic forecast incorporates updates to the projections of gross domestic product (GDP), the unemployment rate, interest rates, inflation, and other economic variables that affect projections of federal outlays and revenues. CBO initially completed its economic forecast in early July; the agency updated the forecast in early August to reflect the policy changes enacted in the Budget Control Act but did not incorporate any other economic or financial news. Revisions to the economic forecast since March have led CBO to reduce projected deficits by \$7 billion for 2011 and by \$683 billion for the 2012–2021 period. Reduced projections of interest payments are by far the largest revision stemming from CBO's updated economic forecast.

Changes to Projections of Outlays

Revisions to CBO's economic forecast have led the agency to increase its estimate of outlays (including debt service) for the current year by \$3 billion but to decrease its estimate for the 2012–2021 period by \$634 billion (1.4 percent). The 10-year change is largely the result of a decline of \$738 billion in projected interest costs—\$634 billion from lower projected interest rates and \$103 billion as a result of lower projected borrowing needs. However, CBO's updated forecast of other economic variables led to net increases in projected outlays for mandatory programs (\$104 billion), which partially offset some of the reduction in projected interest costs.

Net Interest. Economic factors have increased projected net interest outlays by \$7 billion for 2011, mainly because of an increase in costs associated with inflation-protected securities. The increase in the consumer price index for all urban consumers in 2011 (as measured by the index for the third quarter of this year divided by the index for the third quarter of 2010, not seasonally adjusted) is now expected to be 3.2 percent, rather than

the 1.1 percent CBO had previously anticipated. The \$738 billion decline in projected interest costs over the 2012–2021 period is attributable to the lower interest rates and inflation in CBO's current forecast, as well as to lower debt-service costs resulting from the projected decline in cumulative deficits because of changes in the economic outlook. (For more information on the forecast of interest rates and inflation, see Chapter 2.)

Mandatory Spending. Updates to CBO's economic forecast since it prepared the March baseline have raised the agency's projections of mandatory spending over the 2012–2021 period by \$104 billion.

Social Security. As a result of economic changes, projected spending for Social Security has increased by \$52 billion over the 2012–2021 period. CBO now anticipates that there will be a 2.8 percent cost-of-living adjustment (COLA) in January 2012, up from the 1.1 percent COLA that CBO previously projected for that year, increasing benefits for current recipients. That higher COLA raises estimated benefit payments in all following years but is somewhat offset by the downward revision to CBO's projection for inflation in subsequent years (which lowers estimated COLAs by an average of 0.3 percentage points per year from 2013 through 2017.) Benefits in the initial year of enrollment are affected by the growth of wages and salaries; CBO's revised projections of that growth slightly reduce estimated benefit payments between 2013 and 2018, and then slightly raise benefits between 2019 and 2021, yielding no significant change, on net, over the 10-year period.

Supplemental Nutrition Assistance Program (SNAP). Relative to the March 2011 baseline, SNAP benefits are projected to be \$20 billion higher over the 2012–2021 period. The maximum SNAP benefit is determined by the value of the Department of Agriculture's Thrifty Food Plan in June of the preceding fiscal year. To project the annual change after that date, CBO uses the consumer price index for the cost of food purchased for consumption at home. Relative to the March baseline, CBO now projects that the index will be higher in most years of the baseline period, leading to higher per-person benefits beginning in November 2013. (The change in CBO's economic forecast does not affect projected spending before November 2013 because the American Recovery and Reinvestment Act of 2009 [ARRA, P.L. 111-05], as subsequently amended, overrode the usual inflation adjustments and raised the maximum benefit through

whichever point in time occurs earlier: October 2013 or the date at which inflation increases the maximum benefit above the amount established in ARRA.)

Student Loans. Consistent with the procedures set forth in the Federal Credit Reform Act of 1990 (P.L. 101-508), annual outlays for the student loan program are measured as the present value of the cash flows associated with new federal loans disbursed in each year, using the Treasury's borrowing rates to discount those cash flows.⁹ In updating its economic forecast, CBO has reduced its estimate of those rates relative to its March baseline. With lower discount rates, the estimated present value of future repayments associated with student loans increases (that is, such cash flows are discounted less). Thus, CBO now anticipates that outlays for student loans will be \$15 billion lower than previously projected.

Medicaid. CBO projects that Medicaid spending will be about \$15 billion higher over the 2012–2021 period, principally because of higher payment rates for Medicaid services (stemming from higher anticipated increases in the cost of labor) and because of an increase in the forecast for unemployment, which results in greater projected enrollment in Medicaid.

Unemployment Compensation. CBO has lowered its estimate of outlays for unemployment compensation in 2011 by \$4 billion because the average unemployment rate for calendar year 2011 is now estimated to be 0.5 percentage points lower than that in the agency's previous economic forecast.

Over the next few years, CBO projects, the recovery in employment from the recent recession will be slower than previously anticipated. Thus, the agency now projects that outlays for unemployment benefits will be higher than shown in the March baseline, by a total of \$12 billion; most of that increase occurs in 2013 and 2014.

Changes to Projections of Revenues

CBO increased its projections of revenues by \$10 billion in 2011 and by \$49 billion on net (0.1 percent) over the 2012–2021 period because of changes to the economic

forecast. Projected revenues increased slightly in 2011, decreased by \$122 billion between 2012 and 2015, and increased by \$171 billion from 2016 through 2021 relative to the March projections. Those revisions can be attributed largely to the following factors:

- For 2011, CBO increased its estimate of nominal GDP as well as its forecast of profits as a share of GDP, causing an increase in anticipated corporate profits and therefore higher revenues from corporate income taxes.
- CBO decreased its forecast of real (inflation-adjusted) GDP and of wages and salaries as a share of GDP for 2012 through 2015, resulting in lower projections of revenues from individual income taxes and social insurance (payroll) taxes. Partially offsetting those lower revenues was an increase in expected remittances to the Treasury from profits of the Federal Reserve. That change occurred because CBO lowered its projected interest rates, in particular the federal funds rate; as a result, CBO now anticipates that the Federal Reserve will pay less interest on reserves and earn greater profits. (The lower interest rates have a very small effect on the Federal Reserve's earnings from its asset holdings over that period mainly because most of its portfolio is invested in longer-term securities that are expected to be held to maturity.)
- Even though CBO did not significantly change its projection of GDP after 2015, upward revisions to estimates of corporate profits and of wages and salaries as shares of GDP increased projected revenues from corporate and individual income taxes and social insurance taxes. A portion of those increases was offset by reductions in receipts from other sources, mainly from lower customs duties resulting from lower imports than previously projected.

Technical Changes

Technical updates—those that do not stem from legislation or changes in economic projections—to CBO's estimates of revenues and outlays have resulted in a net decrease of \$112 billion in the estimated deficit for 2011 and a further decrease of \$329 billion in projected deficits for the ensuing 10 years. Technical changes account for an increase in projected revenues of \$74 billion for 2011 (3.3 percent) and of \$159 billion (0.4 percent) for the 2012–2021 period; such changes have reduced projected

9. "Present value" is a single number that expresses a flow of current and future income (or payments) in terms of an equivalent lump sum received (or paid) today. The present value depends on the rate of interest (known as the discount rate) that is used to translate future cash flows into current dollars.

outlays by \$38 billion (about 1 percent) for 2011 and by \$170 billion (0.4 percent) from 2012 through 2021. The most important element of those revisions is an increase in projected receipts from individual income taxes and the resulting savings in debt-service costs.

Changes to Projections of Revenues

Relative to its March baseline, CBO has increased its projections of revenues by \$74 billion for 2011, by \$86 billion for 2012, and by a total of \$117 billion from 2013 through 2016 because of various technical factors. The most significant of those is that collections of individual income taxes have been higher than expected, given the performance of the economy in 2010 and during the first half of 2011. CBO expects that the factors leading to higher collections will persist beyond 2011 but diminish rapidly after 2012. Other technical factors, mainly related to unemployment insurance taxes, have led CBO to lower its revenue projections by a total of \$45 billion from 2017 through 2021.

Higher-than-anticipated collections from individual income tax returns for 2010, paid mainly in April of this year, boosted CBO's revenue projections for 2011. CBO now projects that the higher remittances will persist through 2012, but then fade quickly, boosting total revenues by over \$300 billion from 2012 through 2021. The sources of those higher payments in 2011 will be better understood when information from tax returns becomes available over the next year. The most likely source is higher-than-expected income in 2010 from nonwage sources, possibly including capital gains realizations, income from noncorporate businesses (including partnerships and S corporations), pension distributions, and interest and dividend income. Higher-than-expected average tax rates—a result of greater-than-expected increases in income among higher-income taxpayers—may also have contributed. Those developments have their largest effects on CBO's projections of revenues for 2011 and 2012. CBO anticipates that, in ensuing years, the effects will dissipate because taxable income will tend to revert to its historical relationship to GDP and effective tax rates will tend to return to more typical levels.

The other large technical change to CBO's revenue projections involves unemployment insurance taxes. The agency lowered its projection of revenues from those taxes by about \$110 billion over the 2012–2021 period to reflect new analysis. (That change accounts for most of the \$144 billion reduction in projected receipts from

social insurance taxes.) CBO has reevaluated the financial condition of state trust funds at the end of 2010 and determined that states will have less need than previously expected to increase tax rates or make other changes that would increase revenues from state unemployment insurance taxes, which are recorded in the federal budget. CBO has also made a downward technical revision to projected spending for unemployment benefits, which would further diminish the need for revenues coming into the unemployment insurance system.

Changes to Projections of Outlays

Technical revisions to CBO's projections of outlays have resulted in a drop in estimated spending of \$38 billion for 2011 and a reduction of \$170 billion over the following 10 years. Whereas a \$28 billion reduction in CBO's estimate of mandatory spending accounts for the largest technical change to outlays for 2011, lower estimates of net interest outlays (mostly as a result of debt-service reductions stemming from increased projections of revenues) dominate changes for the 2012–2021 period.

Mandatory Spending. Technical revisions to projections of spending for mandatory programs have lowered CBO's estimate for the current year by \$28 billion; the largest set of revisions stems from changes in health care programs. Technical adjustments in the following 10-year period produce mostly offsetting results, netting to an increase of \$7 billion from 2012 through 2021.

Social Security. CBO has increased its projection of Social Security spending by 0.4 percent over the 2012–2021 period on the basis of updated information about the Old-Age and Survivors Insurance (OASI) program and the Disability Insurance (DI) program. The agency now estimates that the number of people receiving benefits under the OASI program will be slightly smaller in 2011 and 2012 than it estimated last March. However, CBO expects the number of people receiving benefits to be higher in subsequent years than it previously anticipated, mostly because the Social Security Administration now projects that more people will be eligible for such benefits. For the DI program, CBO anticipates higher average initial award amounts over the next 10 years. Partially offsetting that projected increase in outlays, CBO expects lower outlays for retroactive DI benefits in 2011 and 2012. Combined, the changes to OASI and DI boost projected Social Security outlays over the 2012–2021 period by \$36 billion.

Health Care Programs. Since March, CBO has made technical revisions that lower its projections of spending for Medicare by \$9 billion for 2011 and by a total of \$10 billion for the 2012–2021 period. Those revisions are based primarily on lower-than-expected spending for Part A (Hospital Insurance) and Part D (prescription drug) services during the first half of calendar year 2011.

CBO has lowered its 10-year projections of spending for other health care programs by a net amount of \$25 billion. That change is mostly attributable to revisions to the agency's methodology for estimating the amount of refundable tax credits that will be provided to subsidize the purchase of health insurance and the amount of cost-sharing subsidies that will be available for health insurance purchased through exchanges beginning in 2014. In addition, CBO is now anticipating a one-year delay in implementing the federal long-term care insurance program, the Community Living Assistance Services and Supports program. Based on the pace of implementation actions thus far, CBO now estimates that the program will begin collecting premiums in fiscal year 2013, lowering projected offsetting receipts (whereas, for the March baseline, CBO assumed that those collections would begin in fiscal year 2012).

Unemployment Compensation. CBO has revised its projection of unemployment compensation downward over the 2012–2021 period by \$23 billion, mostly because of two factors: Recent claims for unemployment benefits have been lower than expected, despite the continued high unemployment rate; and legislation was enacted in some states to reduce the maximum number of weeks an individual can receive regular unemployment benefits.

Other Mandatory Programs. CBO reduced its projection of outlays for other mandatory programs by \$16 billion for the current year to reflect a variety of technical factors. In contrast, those factors led CBO to raise its outlay projections for such programs by \$29 billion for the 2012–2021 period.

The reduction for 2011 is largely the result of a downward adjustment of \$6 billion in estimated outlays for Fannie Mae and Freddie Mac and an increase of \$3 billion in receipts as the result of the sale of oil from the Strategic Petroleum Reserve.¹⁰ The remaining \$7 billion of the reduction in estimated outlays results from a number of smaller technical revisions in other areas of the budget.

For the following 10-year period, CBO has increased its projection of the subsidy costs for Fannie Mae and Freddie Mac by \$10 billion and raised its estimate of outlays from the refundable portion of the earned income and child tax credits by \$8 billion (as a result of updated information on the eligible population). On net, smaller technical changes to other mandatory programs increase outlays in the baseline by \$11 billion over the 2012–2021 period.

Discretionary Spending. Technical adjustments to CBO's projections for a number of discretionary programs have resulted in a net decrease of \$11 billion in estimated outlays for 2011. Most of that decline (\$7 billion) is the result of lower spending for defense programs—primarily procurement and operations and maintenance. The decline in projected spending for those programs reflects slower-than-expected spending to date, in part because of the late enactment of full-year appropriations.

Changes to projections of discretionary outlays between 2012 and 2021 yield a net decrease of \$13 billion, which reflects revisions to the rate at which appropriations are expected to be spent and other factors.

Net Interest. Technical updates have reduced projected outlays for net interest by \$164 billion over the 2012–2021 period. Nearly all of that change (\$157 billion) reflects lower debt-service costs arising from other technical changes—in particular, the higher revenue collections now anticipated for 2011 and 2012. The remaining \$7 billion reduction in projected interest outlays results from two nearly offsetting factors. For the 10-year baseline period, CBO has shifted the mix of securities that the Treasury is expected to use for borrowing toward shorter-term issues, thus reducing projected interest costs by

10. CBO views Fannie Mae and Freddie Mac as part of the federal government. Thus, in keeping with procedures that apply to the government's credit programs, CBO's baseline projections generally show the estimated subsidy costs associated with new credit assistance that those entities are expected to provide. The Administration, in contrast, treats Fannie Mae and Freddie Mac as nongovernmental, and it records as outlays the net payments the Treasury makes to the two entities. The change in estimated outlays for 2011 discussed in this section represents an adjustment in CBO's baseline to align the 2011 estimate with the Administration's procedures because the fiscal year is almost over and because doing so allows CBO to provide the best estimate of what will be recorded in the budget for that year. For future years, CBO's baseline projections continue to show the estimated subsidy costs associated with new credit assistance provided by the two entities.

\$39 billion. Those changes to the assumed borrowing mix reflect the Treasury's recent borrowing patterns and the lower deficits projected under current law. That decrease in interest on the public debt is mostly offset

by an estimated \$32 billion increase in other net interest outlays, largely because of lower projected receipts from the financing accounts associated with the government's credit programs.



CBO's Economic Projections for 2011 to 2021

The tables in this appendix expand on the information in Chapter 2 by showing the Congressional Budget Office's (CBO's) year-by-year economic projections for 2011 to 2021 (by calendar year in Table B-1 and by fiscal year in Table B-2). CBO does not forecast cyclical fluctuations for its projections for years after 2016. Instead, the

projected values shown in the tables for 2017 to 2021 reflect CBO's assessment of average values for that period, taking into account economic and demographic trends but not the potential frequency or size of changes in the cycle of overall business activity.

Table B-1.**CBO's Year-by-Year Economic Projections for Calendar Years 2011 to 2021**

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Year to Year (Percentage change)											
Real GDP	2.4	2.6	1.7	4.4	5.0	3.2	2.8	2.5	2.5	2.3	2.3
Nominal GDP	3.9	3.8	3.1	5.9	6.6	5.0	4.8	4.6	4.5	4.3	4.3
PCE Price Index	2.2	1.4	1.3	1.3	1.6	1.8	2.0	2.0	2.0	2.0	2.0
Core PCE Price Index ^a	1.3	1.4	1.4	1.4	1.5	1.7	1.9	2.0	2.0	2.0	2.0
Consumer Price Index ^b	2.9	1.5	1.3	1.3	1.8	2.1	2.3	2.3	2.3	2.3	2.3
Core Consumer Price Index ^a	1.5	1.4	1.4	1.4	1.7	2.0	2.2	2.2	2.2	2.2	2.2
GDP Price Index	1.5	1.2	1.4	1.4	1.6	1.8	1.9	2.0	2.0	2.0	2.0
Employment Cost Index ^c	1.9	2.8	3.0	3.3	3.6	3.5	3.5	3.7	3.6	3.5	3.3
Calendar Year Average											
Unemployment Rate (Percent)	8.9	8.7	8.7	7.9	6.1	5.4	5.2	5.2	5.2	5.2	5.2
Interest Rates (Percent)											
Three-month Treasury bills	0.1	0.1	0.2	0.8	1.9	3.2	4.0	4.0	4.0	4.0	4.0
Ten-year Treasury notes	3.3	3.2	3.3	3.8	4.3	4.9	5.3	5.3	5.3	5.3	5.3
Tax Bases (Percentage of GDP)											
Wages and salaries	43.5	44.1	44	44.2	44.7	45.0	45.0	45.1	45.2	45.3	45.3
Domestic economic profits	8.6	8.5	8.1	8.5	8.5	8.0	7.6	7.4	7.4	7.2	7.0
Tax Bases (Billions of dollars) ^d											
Wages and salaries	6,633	6,981	7,178	7,637	8,222	8,697	9,127	9,563	10,010	10,463	10,918
Domestic economic profits	1,313	1,337	1,316	1,475	1,564	1,549	1,536	1,567	1,631	1,656	1,688
Nominal GDP (Billions of dollars) ^d	15,238	15,817	16,301	17,261	18,406	19,333	20,260	21,183	22,140	23,096	24,082

Source: Congressional Budget Office.

Note: GDP = gross domestic product; PCE = personal consumption expenditures.

a. Excludes prices for food and energy.

b. The consumer price index for all urban consumers.

c. The employment cost index for wages and salaries of workers in private industry.

d. These values do not incorporate the July 2011 revisions of the national income and product accounts.

Table B-2.**CBO's Year-by-Year Economic Projections for Fiscal Years 2011 to 2021**

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Year to Year (Percentage change)											
Real GDP	2.5	2.5	2.0	3.4	5.3	3.6	2.8	2.6	2.5	2.3	2.3
Nominal GDP	4.0	3.8	3.3	4.9	6.8	5.4	4.8	4.6	4.6	4.4	4.3
PCE Price Index	1.9	1.7	1.3	1.3	1.5	1.8	1.9	2.0	2.0	2.0	2.0
Core PCE Price Index ^a	1.1	1.5	1.4	1.4	1.5	1.7	1.9	2.0	2.0	2.0	2.0
Consumer Price Index ^b	2.5	1.8	1.3	1.3	1.6	2.0	2.2	2.3	2.3	2.3	2.3
Core Consumer Price Index ^a	1.2	1.5	1.4	1.4	1.6	1.9	2.1	2.2	2.2	2.2	2.2
GDP Price Index	1.5	1.2	1.3	1.4	1.5	1.7	1.9	2.0	2.0	2.0	2.0
Employment Cost Index ^c	1.7	2.7	2.9	3.2	3.5	3.6	3.5	3.7	3.6	3.5	3.3
Fiscal Year Average											
Unemployment Rate (Percent)	9.1	8.8	8.6	8.3	6.5	5.4	5.2	5.2	5.2	5.2	5.2
Interest Rates (Percent)											
Three-month Treasury bills	0.1	0.1	0.2	0.6	1.6	2.9	3.9	4.0	4.0	4.0	4.0
Ten-year Treasury notes	3.2	3.2	3.3	3.6	4.2	4.8	5.2	5.3	5.3	5.3	5.3
Tax Bases (Percentage of GDP)											
Wages and salaries	43.5	43.9	44.2	44.2	44.5	45.0	45.0	45.1	45.2	45.3	45.3
Domestic economic profits	8.7	8.4	8.2	8.4	8.6	8.1	7.7	7.4	7.4	7.2	7.0
Tax Bases (Billions of dollars) ^d											
Wages and salaries	6,564	6,869	7,147	7,504	8,078	8,590	9,019	9,452	9,898	10,349	10,805
Domestic economic profits	1,314	1,321	1,325	1,430	1,552	1,552	1,537	1,554	1,615	1,654	1,676
Nominal GDP (Billions of dollars) ^d	15,095	15,663	16,182	16,974	18,132	19,110	20,028	20,948	21,901	22,856	23,830

Source: Congressional Budget Office.

Note: GDP = gross domestic product; PCE = personal consumption expenditures.

a. Excludes prices for food and energy.

b. The consumer price index for all urban consumers.

c. The employment cost index for wages and salaries of workers in private industry.

d. These values do not incorporate the July 2011 revisions of the national income and product accounts.



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Glossary

This glossary defines economic and budgetary terms as they apply to *The Budget and Economic Outlook: An Update*; it also acts as a general reference for readers. In some cases, the entries sacrifice technical precision for the sake of brevity and clarity. Where appropriate, entries note the sources of data for economic variables as follows:

- (BEA) refers to the Bureau of Economic Analysis in the Department of Commerce,
- (BLS) refers to the Bureau of Labor Statistics in the Department of Labor,
- (CBO) refers to the Congressional Budget Office,
- (FRB) refers to the Board of Governors of the Federal Reserve System, and
- (NBER) refers to the National Bureau of Economic Research (a private entity).

A**ggregate demand:** Total purchases by consumers, businesses, governments, and foreigners of a country's output of final goods and services during a given period. (BEA)

alternative minimum tax (AMT): A tax intended to limit the extent to which higher-income people can reduce their tax liability (the amount they owe) through the use of preferences in the tax code. Taxpayers subject to the AMT are required to recalculate their tax liability on the basis of a more limited set of exemptions, deductions, and tax credits than would normally apply. The amount by which a taxpayer's AMT calculation exceeds his or her regular tax calculation is that person's AMT liability.

American Recovery and Reinvestment Act of 2009

(ARRA): This law (Public Law 111-5) was intended to boost aggregate demand during the 2007–2009 recession and subsequent recovery. It provided appropriations for a variety of federal programs and increased or extended some benefits from Medicaid, unemployment compensation, and nutrition assistance programs, among others. ARRA also reduced individual and corporate income taxes and made other changes to tax law.

appropriation act: Legislation under the jurisdiction of the House and Senate Committees on Appropriations that provides authority for federal programs or agencies to incur obligations and make payments from the Treasury. Each year, the Congress considers regular appropriation acts, which fund the operations of the federal government for the upcoming fiscal year. The Congress may also consider supplemental, deficiency, or continuing appropriation acts (joint resolutions that provide budget authority for a fiscal year until the regular appropriation for that year is enacted).

authorization act: A law or legislation under the jurisdiction of a committee other than the House and Senate Committees on Appropriations that establishes or continues the operation of a federal program or agency, either indefinitely or for a specified period. An authorization act may suggest the budget authority needed to fund the program or agency, which is then provided in a future appropriation act. However, for some programs, the authorization itself may provide the budget authority.

automatic stabilizers: Provisions in law that decrease revenues and increase expenditures when the economy goes into a recession (and vice versa when the economy booms) without requiring any new action on the part of the government. Stabilizers tend to reduce the depth of recessions and dampen booms.

Baseline: A benchmark for measuring the budgetary effects of proposed changes in federal revenues or spending. As defined in the Balanced Budget and Emergency Deficit Control Act of 1985, the baseline is the projection of new budget authority, outlays, revenues, and the deficit or surplus into the budget year and out-years on the basis of current laws and policies, calculated following the rules set forth in section 257 of that law. Section 257 expired in September 2006, but CBO continues to prepare baselines following the methodology prescribed in that section.

basis point: One one-hundredth of a percentage point. (For example, the difference between interest rates of 5.5 percent and 5.0 percent is 50 basis points.)

Blue Chip consensus forecast: The average of about 50 private-sector economic forecasts compiled and published monthly by Aspen Publishers, Inc.

budget authority: Authority provided by law to incur financial obligations that will result in immediate or future outlays of federal government funds. Budget authority may be provided in an appropriation act or authorization act and may take the form of borrowing authority, contract authority, entitlement authority, or authority to obligate and expend offsetting collections or receipts. Offsetting collections and receipts are classified as negative budget authority.

Budget Control Act of 2011 (Public Law 112-25): Among other changes, this law set caps on discretionary budget authority through 2021, established procedures for raising the debt limit, created the Joint Select Committee on Deficit Reduction to propose budgetary changes that would reduce deficits by at least \$1.5 trillion over 10 years, and established automatic procedures to cut spending by as much as \$1.2 trillion if legislation originating with the committee did not achieve the required deficit reduction.

budget function: One of 20 general-subject categories into which budgetary resources are grouped so that all budget authority and outlays can be presented according to the national interests being addressed. There are 17 broad budget functions, including national defense,

international affairs, energy, agriculture, health, income security, and general government. Three other functions—net interest, allowances, and undistributed offsetting receipts—are included to complete the budget.

business cycle: Fluctuations in overall business activity accompanied by swings in the unemployment rate, interest rates, and corporate profits. Over a business cycle, real (inflation-adjusted) activity rises to a peak (its highest level during the cycle) and then falls until it reaches a trough (its lowest level following the peak), whereupon it starts to rise again, defining a new cycle. Business cycles are irregular, varying in frequency, magnitude, and duration. (NBER)

business fixed investment: Spending by businesses on structures, equipment, and software. Such investment is labeled “fixed” to distinguish it from investment in inventories.

Capacity utilization rate: The seasonally adjusted output of the nation’s factories, mines, and electric and gas utilities expressed as a percentage of their capacity to produce output. A facility’s capacity is the greatest output it can maintain with a normal work pattern. (FRB)

capital: Tangible and intangible resources that can be used or invested to produce a stream of benefits over time. *Physical capital*—also known as *fixed capital* or the *capital stock*—consists of land and the stock of products set aside to support future production and consumption, including business inventories and *capital goods* (residential and nonresidential structures and producers’ durable equipment). *Human capital* is the education, training, work experience, and other attributes that enhance the ability of the labor force to produce goods and services. The *capital* of a business is the sum advanced and put at risk by the business’s owners: For example, *bank capital* is the sum put at risk by the owners of a bank. In an accounting sense, capital is a business’s net worth or equity—the difference between its assets and liabilities. *Financial capital* is wealth held in the form of financial instruments (such as stocks, bonds, and mortgages) rather than held directly in the form of physical capital.

capital gains and losses: The increase or decrease in the value of an asset that comes from the increase or decrease in the asset's market price after its purchase. A capital gain or loss is "realized" when the asset is sold.

capital income: Income that is derived from capital, such as stock dividends, realized capital gains, an owner's profits from a business, or the interest paid to holders of debt. Compare with **labor income**.

capital services: A measure of how much the stock of physical capital contributes to the flow of production.

central bank: A government-established agency responsible for conducting monetary policy and overseeing credit conditions. The Federal Reserve System fulfills those functions in the United States.

central tendency: The range of projections, truncated to exclude the three highest and the three lowest projections, in the Federal Open Market Committee's quarterly reports on the economic projections of the Federal Reserve's governors and Reserve Bank presidents. Those reports are published twice a year in the minutes of the Federal Open Market Committee meetings and twice a year in the Federal Reserve's *Monetary Policy Report*.

compensation: All of the income due to an employee for his or her work during a given period. In addition to wages, salaries, bonuses, and stock options, compensation includes fringe benefits and the employer's share of payroll taxes for social insurance programs, such as Social Security. (BEA)

conservatorship: The legal process by which an external entity (in the case of Fannie Mae and Freddie Mac, the federal government) establishes control and oversight of a company to put it in a sound and solvent condition.

consumer confidence: An index of consumer optimism that is based on surveys of consumers' attitudes about current and future economic conditions. One such measure, the consumer sentiment index, is constructed by the University of Michigan's Survey Research Center. The Conference Board constructs a similar measure, the consumer confidence index.

consumer price index (CPI): An index of the cost of living commonly used to measure inflation. The Bureau of Labor Statistics publishes the CPI-U, an index of consumer prices based on the typical market basket of goods and services consumed by all urban consumers, and the CPI-W, an index of consumer prices based on the typical market basket of goods and services consumed by urban wage earners and clerical workers. (BLS)

consumption: In principle, the value of goods and services purchased and used up during a given period by households and governments. In practice, the Bureau of Economic Analysis counts purchases of many long-lasting goods (such as cars and clothes) as consumption even though the goods are not used up. Consumption by households alone is also called *personal consumption expenditures* or *consumer spending*.

core inflation: A measure of the rate of inflation that excludes changes in the prices of food and energy.

cost-of-living adjustment (COLA): An annual increase in payments to reflect inflation.

credit subsidy: The estimated long-term cost to the federal government of a direct loan or loan guarantee. That cost is calculated on a net-present-value basis, using interest rates on Treasury securities as the discount rate, and excludes federal administrative costs and any incidental effects on revenues or outlays. For direct loans, the subsidy cost is the net present value of loan disbursements minus repayments of interest and principal, adjusted for estimated defaults (net of recoveries), prepayments, fees, and penalties. For loan guarantees, the subsidy cost is the net present value of estimated payments by the government to cover defaults and delinquencies, interest subsidies, or other payments, offset by any payments to the government, including origination and other fees, penalties, and recoveries.

current year: The fiscal year in progress.

Debt: In the case of the federal government, the total value of outstanding bills, notes, bonds, and other debt instruments issued by the Treasury and other federal agencies. *Debt held by the public* consists primarily of

securities that the Treasury issues to raise cash to fund the operations and pay off the maturing liabilities of the federal government that tax revenues are insufficient to cover. Such debt is held by outside investors, including the Federal Reserve System. Other measures include *debt held by government accounts* (debt issued for internal government transactions, to trust funds and other federal accounts, and not traded in capital markets), *gross federal debt* (the sum of debt held by the public and debt held by government accounts), and *debt subject to limit* (which is subject to a statutory ceiling that applies to gross federal debt, with the exception of a small portion of the debt issued by the Treasury and the small amount of debt issued by other federal agencies, such as the Tennessee Valley Authority and the Postal Service). Securities issued by Fannie Mae and Freddie Mac are not included in any of those measures of debt.

debt service: Payment of scheduled interest obligations on outstanding debt. As used in this report, debt service refers to a change in interest payments resulting from a change in estimates of the deficit or surplus.

deficit: The amount by which the federal government's total outlays exceed its total revenues in a given period, typically a fiscal year.

deposit insurance: The guarantee by a federal agency that an individual depositor at a participating depository institution will receive the full amount of the deposit (currently up to \$250,000) if the institution becomes insolvent.

depreciation: A decline in the value of a currency, financial asset, or capital good. When applied to a capital good, depreciation usually refers to loss of value because of obsolescence, wear, or destruction (as by fire or flood) and is also called *consumption of fixed capital*. *Book depreciation* (also known as *tax depreciation*) is the depreciation that the tax code allows businesses to deduct when they calculate their taxable profits. It typically occurs more rapidly than *economic depreciation*, which is the actual decline in the value of an asset. Both measures of depreciation appear as part of the national income and product accounts.

direct spending: See **mandatory spending**.

discount rate: The interest rate that the Federal Reserve System charges on a loan it makes to a bank through its so-called discount window. Such loans, when allowed, enable a bank to meet its reserve requirements without reducing its lending. Alternatively, the discount rate is the interest rate used to compute the present value of future payments (such as for pension plans).

discouraged workers: Jobless people who are available for work but not actively seeking it because they think they have poor prospects of finding a job. Discouraged workers are not included in measures of the labor force or the unemployment rate. (BLS)

discretionary spending: The budget authority that is provided and controlled by appropriation acts and the outlays that result from that budget authority. Compare with **mandatory spending**.

discretionary spending limits (or caps): Statutory ceilings imposed on the amount of budget authority or outlays provided in appropriation acts in a fiscal year. The current limits, which cover fiscal years 2012 to 2021, were established in the Budget Control Act of 2011 and apply only to budget authority. Under that law, if the estimated budget authority provided in all appropriation acts for a fiscal year exceeded the spending limits for that year, a sequestration—a cancellation of budget authority provided for programs funded by appropriation acts—would be triggered.

disposable personal income: Personal income—the income that people receive, including transfer payments—minus the taxes and fees that people pay to governments. (BEA)

domestic economic profits: Corporations' domestic profits, adjusted to remove distortions in depreciation allowances caused by tax rules and to exclude the effect of inflation on the value of inventories. Corporate domestic economic profits exclude certain income of U.S.-based multinational corporations that is derived from foreign sources, most of which does not generate corporate income tax receipts in the United States. Domestic economic profits are among the best measures of domestic profits from current production. Economic profits are referred to as *corporate profits with inventory valuation and capital consumption adjustments* in the national income and product accounts. (BEA)

Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA): This legislation (Public Law 107-16) significantly reduced tax liabilities (the amount of tax owed) between 2001 and 2010 by cutting individual income tax rates, increasing the child tax credit, repealing estate taxes, raising deductions for married couples who file joint returns, increasing tax benefits for pensions and individual retirement accounts, and creating additional tax benefits for education. EGTRRA phased in many of those changes, including some that did not become fully effective until 2010. For legislation that modified or extended provisions of EGTRRA, see **Jobs and Growth Tax Relief Reconciliation Act of 2003** and **Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010**.

effective tax rate: The ratio of taxes paid to a given tax base. For individual income taxes, the effective tax rate is typically expressed as the ratio of taxes paid to adjusted gross income. For corporate income taxes, it is the ratio of taxes paid to book profits. For some purposes—such as calculating an overall tax rate on all income—an effective tax rate is computed on a base that includes the untaxed portion of Social Security benefits, interest on tax-exempt bonds, and similar items. It can also be computed on a base of personal income as measured by the national income and product accounts. The effective tax rate is a useful measure because the tax code's various exemptions, credits, deductions, and tax rates make actual ratios of taxes paid to income different from statutory tax rates. Compare with **marginal tax rate** and **statutory tax rate**.

employment: Work performed or services rendered in exchange for compensation. Two estimates of employment are commonly used. One comes from the so-called establishment survey of employers (the Department of Labor's Current Employment Statistics Survey), which measures employment as the estimated number of non-farm wage and salary jobs. (Thus, a person with more than one job may be counted more than once.) The other estimate comes from the so-called household survey (the Census Bureau's Current Population Survey), which measures employment as the estimated number of people employed. (Thus, someone with more than one job is counted only once.) The establishment survey covers only people on the payrolls of nonagricultural establishments, whereas the broader household survey includes

self-employed workers, agricultural workers, unpaid workers in family-owned businesses, and employees of private households. However, the household survey is based on a smaller sample than the establishment survey is and therefore yields a more volatile estimate of employment.

employment cost index (ECI): An index of the weighted-average cost of an hour of labor—comprising the cost to the employer of wage and salary payments, employee benefits, and payroll taxes for social insurance programs, such as Social Security. The ECI is structured so that it is not affected by changes in the mix of occupations in the labor force or the mix of employment by industry. (BLS)

estate and gift taxes: A linked set of federal taxes on estates, gifts, and generation-skipping transfers to tax the transfer of wealth from one generation to the next and to limit the extent to which wealth can be given away during life to avoid taxation at death.

euro zone: The area comprising those member states of the European Union (EU) in which the euro has been adopted as the single currency and in which a single monetary policy is conducted under the responsibility of the European Central Bank. Also known as the *euro area*. (Several other countries use the euro as well, but they are not members of the EU. In addition, some members of the EU are not part of the euro zone.) The euro is the world's second largest reserve currency—and the second most-traded currency—after the U.S. dollar.

exchange rate: The number of units of a currency that can be bought with one unit of another currency—for example, the number of euros that can be purchased with one dollar.

excise tax: A tax levied on the purchase of a specific type of good or service, such as tobacco products or air transportation services.

expansion: A phase of the business cycle that begins when gross domestic product exceeds its previous peak and extends until gross domestic product reaches its next peak. (NBER)

Fannie Mae (Federal National Mortgage Association): A government-sponsored enterprise founded during the Great Depression and federally chartered in 1968 as a shareholder-owned corporation that operates exclusively in the secondary market for residential mortgages (the market in which such mortgages are bought and sold). Fannie Mae provides liquidity to the mortgage market by purchasing qualifying mortgages from private lenders, pooling and securitizing them, and then selling them as mortgage-backed securities (MBSs) in the secondary market. The company also holds MBSs and whole mortgages in its portfolio. Since September 2008, Fannie Mae has been in federal conservatorship.

Federal Credit Reform Act of 1990 (FCRA, title V of the Congressional Budget Act of 1974): Legislation that changed the treatment of direct loans and loan guarantees in the federal budget from a cash basis to an accrual basis. It requires that the federal budget record nonadministrative costs and collections associated with a new loan or loan guarantee on a present-value basis in the year in which the loan is disbursed. Under credit reform, the federal cash flows associated with loans and loan guarantees are discounted to that time of disbursement using the interest rates on Treasury securities of comparable maturity.

federal funds rate: The interest rate that financial institutions charge each other for overnight loans of their monetary reserves. A rise in the federal funds rate (compared with other short-term interest rates) suggests a tightening of monetary policy, whereas a fall suggests an easing. (FRB)

Federal Open Market Committee: The group within the Federal Reserve System that determines the stance of monetary policy. The committee is composed of 12 members, including the 7 members of the Board of Governors of the Federal Reserve System, the president of the Federal Reserve Bank of New York, and a rotating group of 4 of the other 11 presidents of the regional Federal Reserve Banks. The open-market desk at the Federal Reserve Bank of New York implements that policy with open-market operations (the purchase or sale of government securities), which influence short-term interest

rates—especially the federal funds rate—and the growth of the money supply.

Federal Reserve System: The central bank of the United States. The Federal Reserve is responsible for setting the nation's monetary policy and overseeing credit conditions.

financing account: A nonbudgetary account required for a credit program that reconciles subsidies calculated on an accrual basis with the cash flows associated with credit activities. The account tracks flows between the Treasury, the program account, and the public. The cash flow in each financing account for a fiscal year is shown in the federal budget as an *other means of financing*.

fiscal policy: The government's tax and spending policies, which influence the amount and maturity of government debt as well as the level, composition, and distribution of national output and income.

fiscal stimulus: Changes in tax rates or government spending intended to encourage economic activity. Fiscal stimulus typically takes the form of temporary or permanent reductions in tax rates, or debt-financed increases in the government's transfer payments or purchases of goods and services.

fiscal year: A yearly accounting period. The federal government's fiscal year begins October 1 and ends September 30. Fiscal years are designated by the calendar years in which they end—for example, fiscal year 2012 will begin on October 1, 2011, and end on September 30, 2012.

Freddie Mac (Federal Home Loan Mortgage Corporation): A government-sponsored enterprise founded in 1970 and federally chartered in 1989 as a shareholder-owned corporation that operates exclusively in the secondary market for residential mortgages (the market in which such mortgages are bought and sold). Freddie Mac provides liquidity to the mortgage market by purchasing qualifying mortgages from private lenders, pooling and securitizing them, and then selling them as mortgage-backed securities (MBSs) in the secondary market. The company also holds MBSs and whole mortgages in its portfolio. Since September 2008, Freddie Mac has been in federal conservatorship.

GDP gap: The difference between actual and potential gross domestic product, expressed as a percentage of potential GDP.

GDP price index: A summary measure of the prices of all goods and services that make up gross domestic product. The change in the GDP price index is used as a measure of inflation in the overall economy.

grants: Transfer payments from the federal government to state and local governments or other recipients to help fund projects or activities that do not involve substantial federal participation.

gross debt: See **debt**.

gross domestic income (GDI): The sum of all income earned in the production of gross domestic product. In theory, GDI should equal gross domestic product, but measurement difficulties leave a statistical discrepancy between the two. (BEA)

gross domestic product (GDP): The total market value of goods and services produced domestically during a given period. That value is conceptually equal to gross domestic income, but measurement difficulties result in a statistical discrepancy between the two. The components of GDP are consumption (household and government), gross investment (private and government), and net exports. (BEA)

Health Care and Education Reconciliation Act of 2010 (HCERA, Public Law 111-152): One of two laws enacted in March 2010 that made major changes to the U.S. health care and health insurance systems. HCERA amended many provisions that were created or amended by the Patient Protection and Affordable Care Act, and it amended the Higher Education Act of 1965, replacing the federal program that provides guarantees for student loans with direct loans and increasing spending

for the Pell Grant program. See **Patient Protection and Affordable Care Act**.

home equity: The value that an owner has in a home, calculated by subtracting the value of any outstanding mortgages (or other loans) secured by the property from the home's current market value.

Inflation: Growth in a general measure of prices, usually expressed as an annual rate of change.

inventories: Stocks of goods held by businesses for further processing or for sale. (BEA)

investment: *Physical investment* is the current product set aside during a given period to be used for future production; an addition to the capital stock. As measured by the national income and product accounts, *private domestic investment* consists of investment in residential and non-residential structures, producers' durable equipment and software, and the change in business inventories. *Financial investment* is the purchase of a financial security, such as a stock, bond, or mortgage. *Investment in human capital* is spending on education, training, health services, and other activities that increase the productivity of the workforce. Investment in human capital is not treated as investment by the national income and product accounts.

Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA): This legislation (Public Law 108-27) reduced taxes by advancing to 2003 the effective date of several tax reductions previously enacted in the Economic Growth and Tax Relief Reconciliation Act of 2001. JGTRRA also increased the exemption amount for the individual alternative minimum tax, reduced the tax rates for income from dividends and capital gains, and expanded the portion of capital purchases that businesses could immediately deduct through 2004. Those tax provisions were set to expire on various dates. (The law also provided roughly \$20 billion for fiscal relief to states.)

Labor force: The number of people age 16 or older in the civilian noninstitutionalized population who have jobs or who are available for work and are actively seeking jobs. (The civilian noninstitutionalized population excludes members of the armed forces on active duty and people in penal or mental institutions or in homes for the elderly or infirm.) The *labor force participation rate* is the labor force as a percentage of the civilian noninstitutionalized population age 16 or older. (BLS)

labor income: Income that is derived from employment, such as wages and salaries. Compare with **capital income**.

labor productivity: See **productivity**.

liquidity: With respect to an asset, liquidity is the quality of being readily convertible into cash—that is, the ease with which an asset can be bought and sold in large quantities without affecting its price. Treasury securities are among the most liquid of assets. With respect to an institution, liquidity is the ability to meet financial obligations by virtue of possessing assets that can be readily converted into cash.

long-term interest rate: An interest rate associated with a security that matures in 10 or more years.

Mandatory spending: Synonymous with *direct spending*, mandatory spending is the budget authority provided by laws other than appropriation acts and the outlays that result from that budget authority. Compare with **discretionary spending**.

marginal tax rate: The tax rate that would apply to an additional dollar of a taxpayer's income. Compare with **effective tax rate** and **statutory tax rate**.

market risk: Risks that investors cannot protect themselves against by diversifying their portfolios; the common component of risk in the prices of all assets. Investors require compensation for market risk because investments exposed to such risk are more likely to have low returns when the economy as a whole is weak and

resources are highly valued. Investors are compensated by a higher expected return on assets exposed to market risk, known as the *market risk premium*.

monetary policy: The strategy of influencing changes in the money supply and interest rates to affect output and inflation. An “easy” monetary policy suggests faster growth of the money supply and initially lower short-term interest rates intended to increase aggregate demand, but it may lead to higher inflation. A “tight” monetary policy suggests slower growth of the money supply and higher interest rates in the near term in an attempt to reduce inflationary pressure by lowering aggregate demand. The Federal Reserve System sets monetary policy in the United States.

monetary stimulus: A reduction in short-term interest rates (equivalently, an increase in the money supply) intended to encourage economic activity. The Federal Reserve can lower short-term interest rates through its open-market operations by purchasing Treasury or other securities. To a more limited extent, it can provide stimulus by reducing the reserve ratio (the percentage of assets that member banks are required to keep on deposit at the Federal Reserve) or by lowering discount rates (the rates at which member banks can borrow money from it).

National income and product accounts

(NIPAs): Official U.S. accounts that track the amount and composition of gross domestic product, the prices of its components, and the way in which the costs of production are distributed as income. (BEA)

national saving: Total saving by all sectors of the economy: personal saving, business saving (corporate after-tax profits not paid as dividends), and government saving (budget surpluses). National saving represents all income not consumed, publicly or privately, during a given period. As measured by the Bureau of Economic Analysis, national saving does not include unrealized capital gains or losses.

natural rate of unemployment: The rate of unemployment arising from all sources except fluctuations in aggregate demand. Those sources include *frictional unemployment*, which is associated with normal turnover

of jobs, and *structural unemployment*, which includes unemployment caused by mismatches between the skills of available workers and the skills necessary to fill vacant positions and unemployment caused when wages exceed their market-clearing levels because of institutional factors, such as legal minimum wages, the presence of unions, social conventions, or employers' wage-setting practices intended to increase workers' morale and effort.

net exports: A country's exports of goods and services minus its imports of goods and services; also referred to as the *trade balance*.

net interest: In the federal budget, net interest comprises the government's interest payments on debt held by the public (as recorded in budget function 900), offset by interest income that the government receives on loans and cash balances and by earnings of the National Railroad Retirement Investment Trust.

NIPAs: See **national income and product accounts**.

nominal: A measure based on current-dollar value. *Nominal income* and *spending* are measured in current dollars. The *nominal interest rate* on debt is the promised dollar return, without an adjustment to remove the effects of expected inflation. The *nominal exchange rate* is the rate at which a unit of one currency trades for a unit of another currency. Compare with **real**.

Obligation: A legally binding commitment by the federal government that will result in outlays, immediately or in the future.

off-budget: Spending or revenues sometimes excluded from the budget totals by law. The revenues and outlays of the two Social Security trust funds (the Old-Age and Survivors Insurance Trust Fund and the Disability Insurance Trust Fund) and the transactions of the Postal Service are off-budget (but are included in the total budget).

offsetting collections and offsetting receipts: Funds collected by government agencies from other government accounts or from the public in businesslike or market-oriented transactions that are credited to an expenditure account (in the case of offsetting collections) or to a receipt account (in the case of offsetting receipts). Both

types of collections are treated for budgetary purposes as negative budget authority and outlays. Collections that result from the government's exercise of its sovereign or governmental powers are ordinarily classified as revenues, although they are classified as offsetting collections or offsetting receipts when a law requires it.

outlays: Spending to pay a federal obligation. Outlays may pay for obligations incurred in a prior fiscal year or in the current year; hence, they flow partly from unexpended balances of prior-year budget authority and partly from budget authority provided for the current year. For most categories of spending, outlays are recorded on a cash accounting basis. However, outlays for interest on debt held by the public are recorded on an accrual accounting basis, and outlays for direct loans and loan guarantees reflect estimated subsidy costs instead of cash transactions.

output gap: See **GDP gap**.

P

atient Protection and Affordable Care Act

(PPACA, Public Law 111-148): One of two laws enacted in March 2010 that made major changes to the U.S. health care and health insurance systems. Among its provisions, PPACA established a mandate for most legal residents to obtain health insurance, provided subsidies for health insurance, and expanded Medicaid. It offset those costs with increased taxes and other revenues and reduced Medicare spending. The law also included several private health insurance market reforms and measures designed to enhance delivery and quality of care. See **Health Care and Education Reconciliation Act of 2010**.

PCE price index: See **price index for personal consumption expenditures**.

personal income: See **disposable personal income**.

potential gross domestic product: The level of real (inflation-adjusted) gross domestic product that corresponds to a high level of resource (labor and capital) use. (Procedures for calculating potential GDP are described in CBO's *Method for Estimating Potential Output: An Update*, August 2001.)

potential hours worked: The number of hours worked by the potential labor force.

potential labor force: The labor force adjusted for movements in the business cycle. Specifically, it is the labor force that exists when the unemployment rate equals the natural rate of unemployment.

potential output: The level of production that corresponds to a high level of resource (labor and capital) use. Potential output for the national economy is also referred to as *potential gross domestic product*. (Procedures for calculating potential output are described in CBO's *Method for Estimating Potential Output: An Update*, August 2001.)

premium assistance credit: A refundable tax credit for the purchase of certain health insurance plans through an insurance exchange. In general, the credit is available to nonelderly people with household income between 138 percent and 400 percent of the federal poverty level who do not receive health insurance through an employer or a spouse's employer.

present value: A single number that expresses a flow of current and future income (or payments) in terms of an equivalent lump sum received (or paid) today. The present value depends on the rate of interest, known as the discount rate, that is used to translate future cash flows into current dollars. For example, if \$100 is invested on January 1 at an annual interest rate of 5 percent, it will grow to \$105 by January 1 of the next year. Hence, at an annual 5 percent interest rate, the present value of \$105 payable a year from today is \$100.

price index for personal consumption expenditures (PCE price index): A summary measure of the prices of all goods and services that make up personal consumption expenditures. The Federal Reserve uses measures based on this index as its primary measures of inflation in conducting monetary policy, because they are more representative of current consumer spending patterns than is the consumer price index. Also referred to as the *chained price index for personal consumption expenditures*.

productivity: Average real (inflation-adjusted) output per unit of input. *Labor productivity* is average real output per hour of labor. The growth of labor productivity is

defined as the growth of real output that is not explained by the growth of labor input alone. *Total factor productivity* is average real output per unit of combined labor and capital services. The growth of total factor productivity is defined as the growth of real output that is not explained by the growth of labor and capital. Labor productivity and total factor productivity differ in that increases in capital per worker raise labor productivity but not total factor productivity. (BLS)

Real: Adjusted to remove the effects of inflation. *Real output* represents the quantity, rather than the dollar value, of goods and services produced. *Real income* represents the power to purchase real output. *Real data* at the finest level of disaggregation are constructed by dividing the corresponding nominal data, such as spending or wage rates, by a price index. *Real aggregates*, such as real gross domestic product, are constructed by a procedure that allows the real growth of the aggregate to reflect the real growth of its components, appropriately weighted by the importance of the components. A *real interest rate* is a nominal interest rate adjusted to remove the effects of expected inflation; it is often approximated by subtracting an estimate of the expected inflation rate from the nominal interest rate. Compare with **nominal**.

recession: A significant decline in economic activity spread across the economy, lasting more than a few months, and normally visible in production, employment, real (inflation-adjusted) income, and other indicators. A recession begins just after the economy reaches a peak of activity and ends when the economy reaches its trough. (Between trough and peak, the economy is in an *expansion*.) (NBER)

recovery: A significant, broad-based increase in economic activity that begins just after the economy reaches a trough of activity and ends when the economy reaches the level of its previous peak.

revenues: Funds collected from the public that arise from the government's exercise of its sovereign or governmental powers. Federal revenues come from a variety of sources, including individual and corporate income taxes, excise taxes, customs duties, estate and gift taxes, fees and fines, payroll taxes for social insurance programs, and

miscellaneous receipts (such as earnings of the Federal Reserve System, donations, and bequests). Federal revenues are also known as *federal governmental receipts*.

S**ecuritization:** A financial process that involves aggregating a number of assets into a pool (often by selling the assets to an entity specifically created for that purpose) and then issuing a new set of securities backed by the assets and the flows of income they generate. The aggregation of assets is intended to redistribute (and thus dilute) the risk that any of the assets will fail to generate the expected income flows.

short-term interest rate: The interest rate earned by a debt instrument (such as a Treasury bill) that will mature within one year.

statutory tax rate: A tax rate specified by law. In some cases, such as with individual and corporate income taxes, the statutory tax rate varies with the amount of taxable income. (For example, under the federal corporate income tax, the statutory tax rate for companies with taxable income below \$50,000 is 15 percent, whereas the rate for corporations with taxable income greater than \$18.3 million is 35 percent.) In other cases, the statutory tax rate is uniform. (For instance, the statutory federal tax rate on gasoline is 18.4 cents per gallon for all taxpayers.) Compare with **effective tax rate** and **marginal tax rate**.

surplus: The amount by which the federal government's total revenues exceed its total outlays in a given period, typically a fiscal year.

sustainable growth rate (SGR): The formula that determines updates to payment rates for physicians under the Medicare program. The SGR sets annual and cumulative spending targets for those payments. If total spending exceeds the targets, an across-the-board reduction is supposed to be made in future fees to bring spending back into line (both annually and cumulatively). Since 2003, however, the Congress and the President have overridden such reductions.

T**ARP:** See **Troubled Asset Relief Program**.

Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (the 2010 tax act, Public Law 111-312): This law temporarily extended through 2012 provisions set to expire in 2010 that were initially enacted in the Economic Growth and Tax Relief Reconciliation Act of 2001, the Jobs and Growth Tax Relief Reconciliation Act of 2003, and the American Recovery and Reinvestment Act of 2009. Those extensions affected individual income tax rates, credits, and deductions. The act also increased the exemption amount for the alternative minimum tax, reduced the employee's contribution for the Social Security payroll tax, modified other tax provisions, and extended benefits for long-term unemployed workers.

total factor productivity: See **productivity**.

trade balance: See **net exports**.

trade-weighted value of the dollar: The value of the U.S. dollar relative to the currencies of U.S. trading partners, with the weight of each country's currency equal to that country's share of U.S. trade. The *real trade-weighted value of the dollar* is an index of the trade-weighted value of the dollar whose movement is adjusted for the difference between U.S. inflation and inflation among U.S. trading partners. An increase in the real trade-weighted value of the dollar means that the price of U.S.-produced goods and services has increased relative to the price of foreign-produced goods and services.

transfer payments: Payments made to a person or organization for which no current or future goods or services are required in return. Federal transfer payments include Social Security and unemployment benefits. (BEA)

Treasury bill: A security issued by the Treasury with an original maturity of no more than one year. Interest on a Treasury bill is the difference between the purchase price and the value paid at redemption.

Treasury bond: A fixed-rate, interest-bearing security issued by the Treasury with an original maturity of more than 10 years.

Treasury inflation-protected security (TIPS): A security issued by the Treasury that is designed to protect investors from inflation by offering a fixed real (inflation-adjusted) rate of interest. The principal of a TIPS is linked to the consumer price index and is thus adjusted to reflect the change in that index; at maturity, the security pays the greater of the original or the adjusted principal. Holders of TIPS receive semiannual interest payments based on the fixed rate of interest and the adjusted principal amount.

Treasury note: A fixed-rate, interest-bearing security issued by the Treasury with an original maturity of more than a year but not more than 10 years.

Troubled Asset Relief Program (TARP): A program that permits the Secretary of the Treasury to purchase or insure troubled financial assets. Authority for the program was initially set by the Emergency Economic Stabilization Act of 2008 at \$700 billion in assets outstanding at any one time (the limit now stands at nearly \$475 billion) and remains in effect only for obligations that have already been incurred. The TARP's activities have included the purchase of preferred stock from financial institutions, support to automakers and related businesses, a program to avert housing foreclosures, and partnerships with the private sector.

trust fund: In the federal accounting structure, an account designated by law as a trust fund (regardless of any other meaning of that term). A trust fund records the

revenues, offsetting receipts, or offsetting collections earmarked for the purpose of the fund, as well as budget authority and outlays of the fund that are financed by those revenues or receipts. The federal government has more than 200 trust funds. The largest and best known finance major benefit programs (including Social Security and Medicare) and infrastructure spending (such as the Highway Trust Fund and the Airport and Airway Trust Fund).

Unemployment rate: A measure of the number of jobless people who are available for work and are actively seeking jobs, expressed as a percentage of the labor force. (BLS)

Withholding: The deduction of taxes by an employer or other payer from wages or other taxable payments to be transmitted directly to a government. Federal tax withholding includes deductions for income taxes, as well as contributions to Social Security and Medicare (payroll taxes). When taxpayers file their tax returns at the end of the taxable year, they either pay the balance of unpaid tax liability or receive any overpayment as a refund. Federal tax withholding is classified as revenue in the federal budget when received by the Treasury.